

**Management of e-book collections in
Cambridge University Library**

Jasmina Makljenovic

A dissertation submitted to Aberystwyth University in partial fulfilment of the requirements for the degree of Magister in Scientia Economica (MSc) under Alternative Regulations

Department of Information Studies

Aberystwyth University

2015

Abstract

The purpose of this study is to investigate the management of e-books in Cambridge University Library (CUL). This will be achieved by exploring the issues associated with the three main stages of the management process: acquisition, access and promotion. A case study of CUL will be built in order to provide insight into practice of dealing with the issues associated with e-books.

In order to obtain a comprehensive picture of the management of e-books in academic libraries a literature review focussing on the stages of acquisition, access and promotion was conducted. In discovering the issues experienced, semi-structured interviews were employed at CUL and later compared to the findings from the literature.

The study looked at the ebooks@cambridge service, which administers e-books for undergraduate students, and the UL Acquisition department, which manages e-books for research. It was found that they both experience similar challenges in terms of acquisition, access and promotion. In terms of acquisition - the challenges are: lack of a formal CDP (Collection Development Policy), availability of titles, choice between suppliers and publishers, and the vast range of acquisition models available. In acquiring e-books for research purpose there is an obvious shift towards DDA (Demand Driven Acquisition) model, while the ebooks@cambridge service is currently using traditional models and testing potential new ones including PDA (Patron Driven Acquisition) and EBA (Evidence Based Acquisition). The input of e-legal deposit is playing an important role and is expected to grow, although there are problems such as restricted access in particular. In terms of access, problems with the variety of platforms and DRM (Digital Rights Management) restrictions are emphasised. The importance of the library catalogue, equally as an access point and a promotional tool, is significant. A lot of effort is put into promoting e-book collections using traditional methods and new ones such as social media, whilst providing training for both library staff and library users was proved to be an effective method in increasing e-book usage.

In order to simplify the acquisition process an e-book collection CDP would be helpful, whilst the input of legal deposit needs to be monitored closely. This is the area where more research needs to be done in the future so a clearer picture of its impact on the collection can be constructed. With further collaboration with the British Library (BL) and other legal deposit libraries, access to e-legal deposit could be improved. Collaboration with publishers and vendors across all e-book collections could improve the quality of received records and the usability of platforms. It was also suggested that collaboration with academics could have a positive impact on e-books usage amongst students.

Declaration

Replace with Declaration page

Table of Contents

Abstract.....	1
Declaration	2
Glossary	7
Acknowledgements	8
Chapter 1: Introduction	9
1.1 Introduction.....	9
1.2 Background	12
1.3 Research aim and objectives.....	13
1.3.1 Research aim.....	13
1.3.2 Research objectives	14
1.4 Research parameters	14
1.5 Methodology	14
1.5.1 Literature review	15
1.5.1.1 Search terms.....	15
1.5.1.2 Search tools	15
1.6 Dissertation structure.....	16
Chapter 2: Literature review.....	17
2.1 Introduction.....	17
2.1.1 E-book definition	17
2.1.2 Main features	18
2.1.3 Management framework	19
2.2 Acquisition	20
2.2.1 Budget issues	20
2.2.2 Selection and availability	22
2.2.3 Variety of purchase models	23
2.2.4 PDA	24

2.2.5 Variety of platforms/aggregators or publishers	25
2.2.6 Conclusion	26
2.3 Access	26
2.3.1 Discoverability	26
2.3.2 The role of OPAC	27
2.3.3 RDA – new rules for new era	27
2.3.4 DRM	28
2.3.5 Access for visually impaired users	29
2.4 Conclusion	30
2.5 Promotion	31
2.5.1 Marketing strategy	31
2.5.2 Promotion tools	31
2.5.3 New promotional tools	32
2.5.4 Conclusion	33
Chapter 3: Methodology	34
3.1 Primary study	35
3.1.1 Research design	35
3.1.2 Case study	36
3.1.2.1 Case study design	37
3.1.3 Data collection	37
3.1.3.1 Semi-structured interviews	37
3.1.3.2 Interview schedule	39
3.1.3.3 Piloting	39
3.2 Problems and limitations	40
Chapter 4: Results	41
4.1 Introduction	41
4.2 Acquisition	41

4.2.1 Different purchasing models	43
4.2.1.1 Individual titles and packages	43
4.2.1.2 DDA, EBA and PDA	43
4.2.2 Electronic Legal Deposit input	45
4.2.3 Conclusion	46
4.3 Access	46
4.3.1 Range of platforms	46
4.3.2 Authentication	47
4.3.3 The library catalogue and record quality	48
4.3.4 DRM	49
4.3.5 Access for visually impaired users	49
4.3.6 Conclusion	49
4.4 Promotion	50
4.4.1 Traditional methods	50
4.4.2 Training	51
4.4.3 The role of the Library Catalogue	51
4.4.4 Social media	52
4.4.5 Library website	53
4.4.6 Conclusion	53
Chapter 5: Discussion	54
5.1 Introduction	54
5.2 Analysis	54
5.2.1 Acquisition	54
5.2.2 Access	56
5.2.3 Promotion	58
5.3 Conclusion	59
Chapter 6: Conclusion	62

6.1 Aims and Objectives	62
6.2 Summary	62
6.3 Outcomes	66
6.4 Recommendations for practice	66
6.5 Recommendations for further research	67
Bibliography	68
Appendix A	75
1: Email to potential interviewees	75
2: Interview recording agreement	76
Appendix B:	77
Interviews transcripts	77
Appendix C	87
Publishers depositing monographs under NPLD	87
Appendix D	88
Print legal deposit infrastructure	88
Appendix E	89
Promotional material.....	89

Glossary

AACR	Anglo-American Cataloguing Rules
APA	American Psychological Association
BL	British Library
CDP	Collection Development Policy
CUL	Cambridge University Library
CUP	Cambridge University Press
DDA	Demand Driven Acquisition
DRC	Disability Resource Centre
DRM	Digital Rights Management
EBA	Evidence Based Acquisition
IP	Internet Protocol
ISBN	International Standard Book Number
JISC	Joint Information System Committee
LD	Legal Deposit
MARC	Machine-Readable Cataloguing
NPLD	Non Print Legal Deposit
OPAC	Open Public Access Catalogue
PDA	Patron Driven Acquisition
RDA	Resource Description Access
UoC	University of Cambridge
VLE	Virtual Learning Environment
VPN	Virtual Private Network

Acknowledgements

All my hard work wouldn't be enough to complete this study, if there wasn't help and encouragement of my family, friends and colleagues.

My gratitude goes to Nebojša (as it always does), for finishing touch on the dissertation (and beyond) and to my twin crusaders for teaching me that learning is a journey, not a destination.

I'd like to thank my parents for supporting me during their hardest time.

I would like to say thank you to all the people who had given their time to be interviewed.

I was privileged to work under Patricia Killiard's lead in CDD Department, whose passion for e-books is inspirational and whose vision motivated me to study e-books even harder. Jayne Kelly and Gotthelf Wiedermann whose knowledge of e-books helped me realise how complicated and interesting e-book management is. And I am immensely grateful to Rachel for putting up with my writing style, grammar and dissertation in general! To Paul I feel indebted for reading my first drafts and for being there in the times of crisis.

Finally, I must thank Ray Lonsdale (my first supervisor) for his valuable advice and David Ellis for his guidance throughout the dissertation process.

Chapter 1: Introduction

1.1 Introduction

The world is becoming increasingly digital, and libraries are no exception. More materials are digitised or simply born digital and the number of libraries with e-book collections is constantly growing (Polanka, 2011).

The library world has been revolutionised several times over in the past few decades and the phenomenon of e-books is part of the latest revolution (Evangeliste & Furlong, 2014). E-books have brought massive change and have had huge impact on library services, but opinions and acceptance are divided and not universal. However, the growing significance of e-books for education is recognised: 'E-books are becoming central to learning and education (Vasileiou, Rowley & Hartley, 2012) and e-books have entered the mainstream of academic communities (JISC & UCL, 2009). E-books can provide opportunities to increase library usage (Ashcroft, 2011) and they are viewed as having the potential to be even more significant for libraries and learners than e-journals, because of the longstanding centrality of textbooks to learning in higher education (Armstrong & Lonsdale, 2005, Rowlands, Nicholas & Huntington, 2007). While some studies have found that e-books are moving into centre stage in library collections (Vasileiou, Rowley & Hartley, 2012) a few such as Minčić-Obradović (2011) discovered that some libraries are still reluctant to buy e-books.

Despite their undeniable potential, e-book acceptance in academic libraries is not universal. Numerous studies have been conducted researching their usage (Ashcroft, 2011, Brown, 2009, JISC, 2009, Armstrong & Lonsdale, 2009, Miller & Pellen, 2009, Polanka, 2011, Vasileiou, Rowley & Hartley, 2013, Walker, 2014). On the other hand there are various examples of library case studies where e-books collections are managed successfully (Conner, 2014, Evangeliste and Furlong, 2014, Minčić-Obradović, 2011, Vasileiou, Rowley & Hartley, 2012).

Literature on the impact of e-books on academic libraries is significant, presenting both its positive and negative sides (Holden, 2010, Minčić-Obradović 2011, Nelson, Armstrong, Edwards, & Lonsdale 2002). Never before has there been so much controversy in libraries as there is about e-book adoption, and a good deal of research has been produced relating to the user population of libraries to understand why (Rettig, 2002, Booth, 2009, JISC 2009). McKiel (2008) and Rowlands, Nicholas & Huntington (2007) analysed student adoption of e-books while many other studies have explored librarians' attitudes, concerns and experiences (Anson and Connell, 2009, Burton, 2013, Information Automation Limited, 2009, McKiel, 2008, Newman, 2010).

There is a correlation between e-books adoption and unresolved issues surrounding e-books management (Vasileiou, Rowley and Hartley, 2012). These issues may be the obstacle to wider acceptance and adoption. For this reason the investigation of current challenges in the management process is required.

The e-book management process is still very complex and librarians are faced with challenges at every stage. It requires different thinking and workflows from what have been practised for decades.

This study aims to make a valuable contribution towards resolving issues surrounding three main stages in the e-books management: acquisition, accessibility and promotion. By exploring the nature of the e-books collection in CUL it will ascertain the key challenges associated with each of the stages. The study will contribute to the research by summarising earlier findings in the literature review chapter and will provide insights on how one specific library dealt with them. The study is built on the work of Burton (2013) who carried out a study of the relationship between e-books and print in the University of Cambridge (UoC), and Walker (2014) who researched the management of e-books within UoC.

The main contribution of this research is the study of two new means of acquiring e-books in main University Library: by legal deposit and the acquisition of e-books for research users.

The study will give an example of the e-book management process taking main CUL as a case study, and it will concentrate on exploring the nature of e-books collection in CUL only.

This research aims to determine whether issues surrounding different stages of e-book management can be resolved in order to improve and build more useful e-book collection open to a wider group of users.

The key areas this study focuses on are the issues and challenges associated with e-books management by studying deeper e-books acquisition, accessibility and promotion.

Looking at acquisition, the study will explore the challenges of working with number of different vendors, and all of the complexity that this involves. Types and subject coverage of e-books packages and individual titles will be covered and different models and options of e-books acquisition will be highlighted.

Issues associated with accessibility and discoverability will be discussed further, highlighting impact of DRM, the role of the library catalogue, and access for disabled users.

The library's role in promoting e-books as an important factor in e-book provision will be highlighted, focusing on the role of library catalogue in particular, equally as a promotional tool and as an access point. Existence of a promotional strategy for e-books, looking at the traditional and new promotion tools used, will be discussed further along with future plans for the promotion of e-books.

Motivation for this research came from the desire for a better understanding of issues surrounding e-books administration. As a Library Assistant dealing with print material only but also as an e-book user, better understanding of difficulties associated with the e-books management will personally help the researcher to better adapt to the shift from print to electronic.

1.2 Background

CUL is a legal deposit library which means that by law a copy of every UK print publication must be given to the library by its publishers. As of April 2013, legal deposit also covers material published digitally and online, so that the library can provide a national archive of the UK's non-print published material. The library can only receive one copy, and legal deposit libraries must negotiate with publishers about the transition from print to electronic. It is anticipated that the extent of the content available electronically will grow over time. Legal deposit plays significant part of the harvested material overall and is expected to become more important part of the e-books collection in the very near future (Cambridge University Library, 2014a).

The Library serves large community of Cambridge University members, with over 18 000 students and 10 000 members of staff. Overall, there are 100 libraries of the UoC and therefore the collaboration between librarians and academics is of great importance.

In 2006 the ebooks@cambridge project was launched. The e-book service itself is based in the main University Library, but is collaboratively funded by almost all Colleges, major Faculties and Departments and the University Library. The project is administered by a team of 1.5 staff and supported by 12 members of the ebooks@cambridge Advisory Group.

The e-books for undergraduate students are all managed by ebooks@cambridge project team. The collection covers all Tripos subjects. New acquisitions models are constantly tested such as PDA and DDA, and EBA. (ebooks@cambridge Service, 2014a).

Current suppliers include ACLS, Cambridge University Press (CUP), dawsonera, ebrary, EBSCOhost, Elsevier, McGraw-Hills's AccessMedicine, MyiLibrary, Oxford University Press, Royal Society of Chemistry, Taylor and Francis, and Wiley.

The initial aim of the project was and still is to provide e-books for undergraduates. In addition, as there is a recognized need for e-books across all groups of library users, the UL Acquisition department has recently started

with e-books acquisition for research students. From a separate UL budget only, more and more e-books for research purposes are being added to the collection, acquired through different models.

Buying e-books for research is fairly recent but the overall aim is to make a transition to e-book as a default (Cambridge University Library, 2014b). At the time of this research there are 28 publishers, mostly North American from which Library is buying e-books in a number of ways. Both individual titles and packages are considered as buying options, while DDA is a preferred model. Currently, with only two publishers (Wiley and CUP), the Library is acquiring e-books through EBA model.

There appears to be a growing demand for e-books. The latest statistics showed that there were 2,657,292 hits on e-book collections during 2014, which is an increase of 81.59% on 2013 usage (ebooks@cambridge, 2014b).

Both departments (ebooks@cambridge and the UL Acquisition department) are experiencing similar challenges in the sense of dealing with different suppliers and publishers, choosing the best models and how to best promote e-books, even if the books are for different user groups.

Managing the collections is a difficult task, and by highlighting issues associated with the different stages, this study hopes to contribute to their resolution and to the building of collections open to more users groups.

1.3 Research aim and objectives

1.3.1 Research aim

The purpose of this research is to investigate the management of the e-book collections in the main CUL by focusing on the challenges associated with e-books acquisition, access and promotion. Ascertaining issues will assist in understanding the current situation with e-books in this particular library, and how changes can be made to reorganise the process.

1.3.2 Research objectives

- To explore the nature of the e-books collections in the UoC
- To investigate the issues associated with the different models and options of e-books acquisition
- To investigate the issues associated with e-book accessibility and discoverability
- To evaluate the promotion of e-books collections in the UoC
- To investigate whether the issues and challenges identified through the study can be resolved in order to improve e-book provision

1.4 Research parameters

This study focused on the e-book collections in the main CUL only, and it looked at the provision of e-books to University members only. Main CUL is taken as a case study and it does not represent all academic libraries.

The study consists of 4 interviews and a literature review of recent research published in the field of e-books.

The literature review covers recent relevant research in the field of e-books in academics libraries only, in order to provide the most relevant investigation.

1.5 Methodology

The research method used in the study consisted of indicative review of the literature and 4 interviews with key persons responsible for e-book administration in the main CUL. On each theme, acquisition, access and promotion, thorough analysis of the literature is conducted, and later compared to interview results.

Semi-structured interviews as a data collection method were focused on three main themes: e-books acquisition, access and promotion. Based on the findings from the interviews the case study of CUL is built.

1.5.1 Literature review

1.5.1.1 Search terms

While searching for the relevant literature in the field of academic e-books in libraries the most used term was 'e-book' (and its variations). The search was then narrowed to 'e-books acquisition', 'e-book management', 'e-book promotion' and 'e-book access'.

The search usually resulted in a number of hits, but for more specific questions such as different models of acquisition and promotion, more specific terms were used as well: 'Patron driven acquisition', 'Demand driven acquisition', 'Evidence based acquisition'.

Although the literature search was not limited to a particular date range, subsequent evaluation revealed that most of the relevant works consulted in the study were published in 2010 and later and more than 90% were published in 2005 or later.

1.5.1.2 Search tools

A variety of search tools were used and mixture of sources to reflect the recent research.

Both books and e-books were found via OPAC, Library Search (at the UoC), Primo, and CADAIR catalogues (at Aberystwyth University). E-books were mostly from Dawsonera and MyiLibrary platforms.

Internet sources included: Information Automation Limited (IAL) and Google Scholar.

Recently published journal articles on the subject of e-books in academic libraries were identified through searches of Lisa (Library and Information Science Abstracts), and Lista (Library, Information Science & Technology Abstracts) and located via Library Search +, ejournals@cambridge (at the UoC) and e-journals@Aber (at Aberystwyth University). Social media tools such as blogs and Twitter were also consulted.

1.6 Dissertation structure

The literature review briefly summarises findings from previous research on e-books and draws together their insights on e-books acquisition, access and promotion. This is followed by an outline of the methodology. The interview results are reported in the next chapter and then compared to the findings from the literature review. This is followed by a conclusion that offers recommendations for further practice and research.

Citations from the interviews are given in italics. They are referenced in American psychological Association (APA) 6th edition format.

Chapter 2: Literature review

2.1 Introduction

The first step in designing a case study is literature review. It will find out what already exists in the e-books area of research. It will identify major contributions from recent research in the field while “familiarity with subject knowledge will enable gaps and anomalies in previous research to be identified” (Hart, 2011, p.35).

The management of e-books is discussed in the literature (Armstrong, Edwards, & Lonsdale 2005, Johnson 2013, Holden 2010, Polanka 2012, Vasileiou, Rowley & Hartley, 2012) along with the issues associated with the different stages identified. However, as issues surrounding e-books are constantly changing it is necessary to highlight current challenges, and further examination of the management is required.

After briefly describing the concept of e-books and their main features, the literature review will look closely at three stages in the management process: acquisition, access and promotion. It will summarise findings on the issues associated with each of the stages.

2.1.1 E-book definition

As Minčić-Obradović (2011, p.9) observed, “the concept of the e-book has evolved over time”. E-books have changed in format, content and standard, and they continue to do so. Even defining the term e-book is challenging, and the terminology is imprecise: e-books (ebooks), electronic books, digital books, online books, etc. An e-book is defined as “any piece of electronic text regardless of size or composition (a digital object), but excluding journal publications, made available electronically (or optically) for any device (handled or desk bound) that includes a screen” (Armstrong, Edwards & Lonsdale, 2002) and “as an online version of printed books, accessed via the Internet” (JISC, 2003).

2.1.2 Main features

There is controversy around e-books even in discussion about their advantages and disadvantages. The most highlighted advantages in the literature, as found in the research of Aschroft, (2012), Holden (2010), Johnson (2012), Polanka (2012) are:

- 24/7 access
- Space and storage
- Convenience
- Ease of access for users with disabilities
- Enhanced features like bookmarking, note taking, full text searches
- Environmentally friendly

They all agree that e-books are transforming libraries and creating more user-orientated collections. However, Brunskill (2012) noticed that simply because a format is new it does not make it better. The advantage of access anytime and anywhere with an internet connection can turn into a disadvantage as not everyone possesses a device to get access.

The environmental impact of e-books is difficult to measure. E-books are in the centre of the controversial debate over how green they really are. As Wilson (2014, p.5) noticed “it is interesting to note that there exists a general assumption that e-books are by their very nature greener”. A culture of unscrupulous manufacturing practices, constant device upgrading, energy intensive usage, unnecessary printing and irresponsible disposal of devices which contain toxic substances all needs addressing. Companies need to be held more accountable for the full life-cycle environmental cost of e-reading devices and for their role in the environmentally damaging impact (Wilson, 2014). On the other hand Chowdhury’s and Kozak’s research is in favour of e-books. Chowdhury (2012) claim that the environmental impact of the printed book is greater for libraries because “library storage of books requires a considerable amount of energy and constant temperature and humidity condition has to be maintained throughout the year” (p.63). Kozak’s earlier research from 2003 compared a student purchasing 40 textbooks with 40 e-

books (using a Gemstar e-reader) and concluded that e-books caused less of an environmental burden.

The environmental impact as a (dis)advantage of e-books needs to be addressed further in the future.

As the e-book environment is rapidly changing there is a possibility that many of the disadvantages will fade. Currently, the research of Polanka (2012) and Johnson (2013) recognised more pressing disadvantages as:

- DRM (allowing very limited copying, downloading and printing)
- Creation of digital divide
- Variety of formats
- Availability

All of these disadvantages affect e-book management at different stages.

2.1.3 Management framework

Management of e-books collections is challenging and many of the issues and problems associated with each stage of the process of running e-books collections, such as access, cataloguing, acquisition, promotion and adoption are highlighted in the literature (Armstrong & Lonsdale, 2005, Connaway, 2003, Information Automation Limited, 2009, Minčić-Obradović, 2011, Vasileiou, Rowley, and Hartley, 2012). The incorporation of e-books in academic libraries around the world is well covered in the literature, Japan, China and Taiwan are some of the examples where e-book industry is growing (Ho, 2012).

The libraries where e-book collections have been implemented agree that “managing e-book collections is a challenging task” (Minčić-Obradović, 2011, p.11). But in the absence of “an agreed-upon overarching framework of the processes associated with the management of e-books in academic libraries” (Vasileiou, Rowley and Hartley, 2012) it is difficult to compare and contrast the findings, or to develop clear guidelines for e-book management. In the same article the authors recognised 9 stages in the e-book management process and their findings are in accordance with Ashcroft’s (2012) research. Ashcroft

recognised the same issues, whilst the only piece of research which provided a holistic framework of the issues and challenges with each of the stages was Vasileiou, Rowley & Hartley (2012).

This research will study deeper the issues associated with acquisition, access and promotion whilst briefly mentioning the formulation of a CDP, cataloguing and use evaluation, the stages researched deeper by Vasileiou, Rowley & Hartley (2012).

E-book collections require different workflows, systems and skills. As Shelburne (2009, p.59) suggested e-books are “exciting and controversial topic for librarians, publishers and users”.

2.2 Acquisition

2.2.1 Budget issues

Managing a budget and choosing between different e-book purchase models are two of the main issues surrounding e-books acquisition. Many libraries face budget problems as price is an important consideration.

The studies of Armstrong & Lonsdale, (2002), Ashcroft, (2011), Johnson, (2011), Newman, (2010), and Polanka (2012), who researched e-book management, consider establishment of a budget for e-books as the main challenge.

Despite common expectations that e-books have to be cheaper than their print counterparts – they are not (Armstrong & Lonsdale, 2003). Although, currently e-book acquisition represents only a small proportion of the purchasing of most academic libraries many predict significant growth in the purchase and availability of e-books over the next years (Newman, 2010). Recent research shows that libraries don't have a separate e-books budget dedicated to e-book acquisitions (Anson and Connell, 2009, Vasileiou, Rowley & Hartley, 2012) and

that “no best practice exists for allocating budgets for e-content” (Johnson, 2013, p.128).

There are predictions that academic library collection growth is driven by patron demand (Conner, 2014) and therefore the allocation of budget is of significance.

Libraries continue to struggle in finding the most effective way to prepare and manage budgets that cover access to and purchase of e-content. Budget models vary in how they handle allocation of and responsibility for expanding funds on e-resources. Some libraries have a single central fund line used for all e-resources, opting to track purchases by format only (Johnson, 2013). In this way they stress the priority of e-resources. The advantage of this approach is simplicity. Managing the budget of DDA in models such as pay-per-view and PDA is complicated, sometimes libraries have no retrospective data on which to base future allocations. Many libraries have found that use quickly outstrips the funds that have been allocated (Johnson, 2013, Zhang, 2012). In the case of the pay-per-view model payment is required in exchange for permission to read an individual document, book or book chapter. Libraries opt for this model as a less costly alternative to subscriptions when “it is projected to be less expensive than the cost of an annual subscription and a faster and potentially cheaper alternative than Inter Library Loan” (Johnson, 2012, p.31). The logic behind this budgeting approach is that the library is providing “just in time” access to meet users’ immediate needs instead of purchasing “just in case” content that the user may want at some future date.

The issue of budget is also related to the challenge associated with the variety of purchase models. The findings of the authors mentioned above can be summarised in Ashcroft’s words (2011, p.398): “It is a supermarket style price war”.

However the value of an e-book does not entirely depend on price. Other considerations reflect the terms of the licence, subscription or purchase, the number of simultaneous users, the ease of access and usability of the platform.

2.2.2 Selection and availability

While building e-book collection the input as to the selection of titles is required, as with the purchasing of print. The processes of selection are considered in depth by Clayton & Gorman (2006) and Johnson (2009, 2013). Johnson (2013, p.21) highlighted that “the most basic guideline for selecting e-content is to choose content that meets user needs and advances the mission of the library”. Although, without clear guidelines incorporated into CDP “librarians face issues and challenges throughout the entire process of e-book management” (Vasileiou, Rowley & Hartley, 2012, p.282). Different studies stressed the importance of incorporation of e-books into CDP, and recognised lack of guidelines, or separate policies, as a main issue (Anson and Connell, 2009, Johnson, 2009, Shaw, 2012, Vasileiou, Rowley & Hartley, 2012). It is pointed out that CDP needs to address e-book issues, and need to be constantly under review in order to reflect constant changes. The study of Buckley and Tritt (2011) emphasised that prevalence of e-books cannot be ignored and they see the situation concerned with CDP as improving: “E-books play an increasingly larger role in collection development policies” (Buckley and Tritt, 2011, p.14).

As with print, a variety of methods can be used in e-book selections (Fieldhouse & Marshall, 2012, Newman, 2010, Vasileiou & Rowley, 2011, Armstrong & Lonsdale, 2005). Newman (2010, p.30) emphasised the importance of print usage, while in the research of Vasileiou, Rowley, & Hartley (2012, p.31) reading lists were most used by participant in their study. Both studies agree that recommendations from users and book reviews were of less significance. Research of Armstrong & Lonsdale (2005) expressed concern over “the ignorance that persists among academic staff” (p.40) and in turn lack of awareness of e-books affects reading lists. With the collaboration improved, there is a bigger chance for e-book growth.

The research of Vasileiou & Rowley (2011) and Armstrong & Lonsdale (2005) emphasised the problem with availability. Lack of e-textbooks which are essential for undergraduates, is problem in particular (Information Automation Ltd, 2009) although there are differences between disciplines. Both research

concluded that discovery of e-books is hindered by the lack of sources that advertise e-book availability across the platforms. Associated with this problem is an issue of often delay between print and electronic. Publishers are concerned about revenues and in this way “can maximise the print profit” (Johnson, 2013, p.29). However, the situation is seen as improving and the studies mentioned above see the collaboration between all parties involved vital to the future success of e-books.

2.2.3 Variety of purchase models

The variety of purchase models that vendors offer, the varying formats of e-books, and the difficulties in selection, are all issues discussed in the literature (Burton, 2013, Johnson, 2013, Minčić-Obradović, 2011, Newman, 2009, Vasileiou, Rowley & Hartley, 2012, Walker, 2014).

E-books purchases are usually through packages, individual titles or subscriptions with new models emerging: DDA or PDA and EBA (Dillon, 2011, Fieldhouse & Marshall, 2011, Newman, 2010, Polanka, 2012).

“It is this variety that provides the challenge” (Kirchhoff, 2012, p.72). Perpetual access is the preferred model in academic libraries, as recognised in the literature (McKiel, 2007, Newman, 2010) due to its reasonable cost in the long term and its simple approach. But, the literature has only lately realised the inconsistency of suppliers regarding perpetual access (Polanka 2012, Kaplan 2012, Price & Havergal, 2011, Fieldhouse & Marshall, 2011, Minčić-Obradović, 2011) and there is general agreement that publishers and vendors need to collaborate more closely.

An advantage of package purchasing is the cost per title can be low. Decisions on how large and how quickly librarians want to build their collections impacts the preferred purchase model. But, as recognised by Polanka (2012) the current situation is that “British universities actually spend more money on packages than on title- by- title purchases”. In contrast, Armstrong & Lonsdale (2005, p.45) and Vasileiou, Rowley and Hartley (2012, p. 289) found that “the

majority of academic libraries in the UK prefer to buy titles on a one to one basis.

In Howards' (2009, p.21) words "the toxic economy has eaten away acquisition budgets...and some see the crisis as a chance to change the way they do business".

2.2.4 PDA

Terminology in the literature for PDA differs, in the same way as for e-books. Demand driven acquisition, patron-selection programs, research-driven acquisition model, patron-initiated purchase, are all synonyms.

PDA is seen by many as a new model solution for libraries struggling with their budget. As highlighted by Sward (2011) PDA is equally a response to recession and diminished budgets, which have led both to the need to buy fewer books and to repurpose staff, even if the library becomes busier. PDA is the product of technology and very specifically of the coming of age of e-books. Publishers "show a willingness to go along with PDA" as a method for libraries to acquire books (Sword, 2011, p.3). The advantage of PDA model is that libraries pay full price for books that are used extensively, pay by the use for books that are used lightly, and pay nothing for books that simply dwell in their catalogues as unwatched bibliographic records.

The advantages of PDA are highlighted in the literature by Lugg (2011), Levine-Clark (2011), Polanka (2012), and Dillon, (2011). To summarise their findings, PDA emphasizes collecting for and at the moment of need, it enables acquisition at the point a title is needed, rather than buying speculatively. Lugg (2011) pointed out that by putting selection and purchasing power directly into the hands of users; one of the library's most important historical roles fundamentally changes. On the other hand there are dangers in solely listening to users (Ulwick, 2002), and some selection should remain in the hands of experts. They may have a better sense of which works will stand the test of time, a better understanding of the literature of a discipline and budget realities. Another core academic library value is the commitment to preserving material.

For this reason perpetual access arrangements should be made with e-book vendors.

Levine-Clark (2011, p.59) concludes that “if PDA is to work on a large scale, vendors must help libraries manage the titles available to patrons”. This would include providing metadata for access to the titles and managing long-term access and removal of unused books from the pool. Collaboration between libraries and vendors is key for the PDA model to develop and stay.

2.2.5 Variety of platforms/aggregators or publishers

Different platforms are considered as factors affecting acquisition and simplicity in navigation and use adds value to the e-book. Platforms have an impact on the library’s decision as to who to buy an e-book from, either an aggregator or a publisher. “One feature of the pre-electronic world – the fact that a high street bookseller or a library supplier would supply any book from any publisher – has not been carried forward in the digital world” (House, 2012, p.48).

Different platforms are offered by different suppliers. Libraries are taking into consideration the usability of the platforms on both PC’s and mobile readers, and whether titles from the same reading list are located on the same platform. As a case study of the University of Liverpool showed (Bucknell, 2012) “it quickly became apparent that this vision [that all the University of Liverpool’s e-books could be offered on a single platform] would not become a reality” (p.72).

Aggregators sell e-books from a selection of publishers. They make contracts with publishers and to allow the content of those publishers to be available on their platform. In addition, some publishers have developed their own platforms and offer items from other publishers as well.

Aggregators who have developed large databases of e-books are in a position to make those databases available for integration into an online catalogue. The catalogue then presents information both on material purchased or licensed by the library, and material available for viewing or download.

The research of Burton (2013), Johnson (2013), and Polanka (2012) who studied deeper the relationship between libraries and content suppliers, agree that it is librarian's responsibility to obtain the best deal possible - one that results in cost-effective services and e-content that meet users' needs. And again Ashcroft's (2012) words about 'supermarket price war' are in accordance with these findings. To some extent Dillon (2011) agrees but adds that libraries need to be more comfortable with less control and less ownership.

This observation is the essence of new acquisition models such as PDA or EDA.

2.2.6 Conclusion

More research on identifying factors that have an influence on acquiring e-books collections is required. Many of the factors have been identified but the range of problems accompanying e-books still exists and "some libraries are still reluctant to purchase e-books" (Minčić-Obradović, p. 9).

As recognised in the literature it is essential that publishers and vendors work together and make more e-books available to libraries through an increased number of different business models. Also, new purchase models have the potential to fundamentally transform library practice and the relationship between publishers, book vendors and library users. "There will be a great deal of uncertainty" (Lugg, 2011, p.15) and the experimentation and patience is required. There are dangers and benefits.

2.3 Access

2.3.1 Discoverability

The problem of the discoverability of e-books is highlighted in the literature by research of Armstrong, Edwards & Lonsdale, 2002, Armstrong & Lonsdale, 2005, Woodward, 2010, Vasileiou, Rowley & Hartley, 2012). As Marks and Janke (2009) put it "the concept of discoverability is perhaps the biggest

challenge. The challenge for librarians and publishers is how to work together to steer the end users to the content in a library setting” (p.441). Other challenges associated with e-book acquisition and licencing are issues in dealing with their multiple formats, their seamless integration into the library catalogue, and maintaining their holdings in the library catalogue.

2.3.2 The role of OPAC

Most commonly libraries provide access to e-books through library Web sites and their OPACs.

There is strong evidence that providing an effective access route to e-book titles through their inclusion in a library catalogue is strongly related to increased e-book use (Armstrong & Lonsdale, 2005, Dillon, 2011, Tedd, 2005). A Springer survey (as in Vasileiou, Rowley & Hartley 2012) reported that in two surveyed Universities the average number of e-book chapter downloads per month more than doubled after e-book MARC records were loaded into the library catalogue. Access is also provided via suppliers’ websites. As Ashcroft’s (2011) research confirmed the highest percentage of students found out about e-books from the library web-site. The role and importance of OPACs is discussed in the literature (Mundle, 2009, McKiel 2008, Singer, 2012). Integrating MARC records for e-books into a library’s catalogue enhances access to its collection and allows for print and electronic library’s holdings to be viewed at the same time. It is necessary that adequate and appropriate access arrangements are developed so that users are able to locate individual titles, search and browse on the basis of author names, titles and a wide range of subject access terms.

2.3.3 RDA – new rules for new era

Resources Description and Access (RDA) is the new standard for cataloguing, aiming to improve discoverability, for the future in a more linked data environment. In its full potential it will enable users to search more precisely in library catalogues and in the broader internet. And as RDA rules of description reduce ambiguity and improve its precision users’ experience of resource

discovery is very much improved (Oliver, 2010). Users should find the information they are looking for but also additional information beyond their expectations.

As RDA is intended to describe all types of resources from around the world, it is also designed for use by communities around the globe. Its adaptability for use in the international context will potentially widen the community of users.

It is international and a coordinated implementation and it “will further improve the consistency of data, support the seamless exchange of records, as well as enable the shared use of the same training and procedure documents” (Oliver, 2010, p.121).

At present, libraries have started with adoption of new rules (British Library, 2014, Cambridge University Library, 2014, Bodlean Libraries, 2014) but there are opinions that they don't bring anything new and are “a giant leap backwards for cataloguing” (Gorman, 2011).

2.3.4 DRM

DRM restrictions as a challenge to e-books access is widely discussed in the literature (Ashcroft, 2011, Clay, 2011, Fieldhouse and Marshall, 2012, Johnson, 2013, Polanka, 2011, Walters, 2014). DRM restrictions prevent users from carrying out activities that publishers or suppliers want to prohibit. There are legal copyright restrictions on e-books, (when accessed online and after downloading), in the same way that there are on printed books, and it is libraries' responsibility to make sure they stay within copyright law.

Arguably, the technological advantages of e-books are likely to be realized only to the extent that publishers and distributors can profit from them. Slater (2010, p.305) noted that “many of the unexpected limitations [users] encounter when using e-books are not inherent to the format. Most often, they are purposefully imposed limitations tied to digital rights management techniques”. Ashcroft's (2011) research confirmed that one of the main factors to hinder users in their

uptake of e-book content is DRM while Walters (2014) agreed and added that DRM restrictions are not always made clear to users. However, Bucknell (2010) noted that “many librarians seem to have grown accustomed to extensive restrictions on use” (p.126).

The main problem recognised in the literature considering DRM is that “e-book suppliers seem unwilling to adopt the practices that have proven successful in the e-journal marketplace” (Walters, 2014, p.102) and they continue to build restrictive, proprietary interfaces designed to prevent users from gaining the full benefits of e-book technology. In accordance with Walter’s (2014) research, Dillon (2011), concluded that “lessening digital rights restrictions will be critical to future success of new models such as PDA, as well as e-books” (p.191).

Overall, restrictions on sharing and use are amongst the most important barriers to the large-scale adoption of e-books in academic libraries, as Armstrong and Lonsdale (2005) concluded in their research on challenges in e-book management.

2.3.5 Access for visually impaired users

Ease of access for visually impaired users is praised in the literature as one of the main advantages of e-books. “E-books offer something that paper books never could: the ability to be fully accessible to people with disabilities” (Petri, 2012 p.36). Comparing the situation in 2008 where “only 4.5% of all the British books were accessible to people with print disability” (Whitehouse, 2009, p.120) the more recent literature found out that situation is improving (Enis, 2013, Naught & Alexander, 2014, Petri, 2012, Whitehouse, Dearnley and Murray, 2010) and “we are nearing the time when accessible e-books are not a socially ghettoizing” (Petri, 2012, p.38).

Earlier research of Whitehouse (2009, p.122) recognized issues with cost, restrictive procedures imposed by publishers, and the lack of standard licensing

terms as the main obstacles into providing accessible copies by publishers to academic libraries. The more recent studies shows that there is a massive step forward in collaboration in providing files between publishers and libraries (Enis, 2013, Naugh & Alexander, 2014, Petri, 2012). More education publishers are enabling text-to-speech (Enis, 2013) and “some moved toward producing accessible e-books as a primary format, like O’Reilly, which distributes its e-books in bundles of multiple DRM-free formats” (Petri, 2012, p.49). The literature stressed out that rapid technological development will put pressure on e-book publishers and device makers to move toward accessibility.

2.4 Conclusion

Further research should be conducted into the issues associated with providing access to e-books. The literature showed that the most common strategy for discovery and access – including e-books in the library catalogue – brings challenges, such as limited availability, generally low quality of vendor supplied records and DRM restrictions.

Studies of how users access e-books and whether they use the catalogue to find e-books, as opposed to other search methods, may offer clues for developing access points to e-books. In the very near future students are likely to expect their universities to provide seamless access to e-books through online library catalogues and Virtual Learning Environments (VLE) (Vasileiou, Rowley & Hartley, 2012).

2.5 Promotion

2.5.1 Marketing strategy

Different promotion initiatives, surveys of e-book usage, and changes in users' behaviour are well researched and supported in literature. In the literature the main issue associated with e-book promotion is recognised as the lack of formal marketing strategies in libraries (Lonsdale & Armstrong, 2010, JISC, 2009, Vasileiou, Rowley, & Hartley, 2012) and it suggests that there is a dichotomy between strategy and practice. Findings from the Information Automation Limited study (2009) showed that "academic libraries are moving slowly towards the formulation of such strategies" and that promotion of e-resources in general is "rarely undertaken as a part of long term, planned approach" (p.51). JISC and National e-book observatory (2009) found out from their yearlong study on the e-textbooks availability and use from over 120 universities, libraries have to promote their use to their various communities and that promotion directly affects the usage. These conclusions are in accordance with Vasileiou, Rowley & Hartley's (2012) research which stated that "library services would not be used if they are not known". Librarians generally see promotion of collections as secondary, only to the provision of access (JISC, 2009). However, there is a recognised need for promotion to reinforce the importance of e-books. Minčić–Obradović (2011) suggested that e-book collections should be promoted to all potential users – students, teachers and library staff.

2.5.2 Promotion tools

The key promotion tools mentioned in the literature are library web sites, information literacy sessions, OPACs, induction sessions, in person instructions, and e-mails. Vasileiou & Rowley (2011) found out from semi-structured interviews with 25 academic librarians that the library web site was mentioned the most. The use of a library's website as a promotional tool is recognised in the literature as it offers lots of promotional opportunities including announcements and short descriptions of content (Lonsdale &

Armstrong, 2005, Minčić-Obradović, 2011, Vasilieou, Rowley & Hartley, 2012). There is evidence that many academic libraries create dedicated e-book pages as part of their websites (Minčić-Obradović, 2011).

E-book training courses are another popular means of raising awareness and promoting the use of e-books among students and staff (Minčić-Obradović, 2011, Lonsdale and Armstrong, 2005). They are equally useful for both groups as they help them understand the nature of e-books, build an appreciation of the advantages and disadvantages of the e-books, and explain differences between e-book collections.

The importance of the library catalogue is widely recognised and was discussed earlier as being able to locate e-books is another important step in promoting them. Popularity of search engines such as Google may lead users to bypass library catalogue, relating back to the issue of authentication mentioned previously.

2.5.3 New promotional tools

In addition to tools already in use, Vasilieou & Rowley (2011) gave evidence of staff involved in investigating new promotional media and working on implementing new ways to increase the e-book uptake. These include: development of an information literacy project, use of online chat, promotion of e-books in course committee meetings, provision of a paper guide for e-books, marketing at the shelf level through the use of cd cases, improvement of information literacy sessions, development of lists with all new e-books acquired, and drop in sessions on e-books.

These findings are in accordance with Lonsdale & Armstrong's research (2010) which acknowledged that there is a general awareness of the potential of social media and a sense that libraries should be developing such approaches. There is evidence in the literature of more innovative techniques such as blogs and Facebook, and general awareness of the potential of using social networking. In many instances, promotional activities inevitably do not distinguish between e-books and other resources. Reflecting on the literature on both the promotion

of e-books and e-resources, Lonsdale & Armstrong (2010) noticed that librarians placed a greater emphasis on the creation and use of conventional, printed promotional materials.

2.5.4 Conclusion

Reflecting on the variety of promotional activities discussed in the literature Lonsdale & Armstrong (2010), it is evident that libraries focus on the more traditional approaches at present, although there is general agreement that some new and innovative methods seem likely to become established in the near future. Social media is becoming a new powerful promotional tool as many case studies have confirmed: University of Cambridge, (Walker, 2014), University of Portsmouth, (Worden, 2014) among many others.

Chapter 3: Methodology

A qualitative method is appropriate for this study as “the phenomena under study are complex, and do not lend themselves to quantification” (Connaway and Powell, 2010, p.77). The phenomenon of e-books is complex and due to space limitations only three aspects of e-books management are being researched in this study. The challenges associated with each of the three stages will be investigated.

The research is qualitative because “analysis is not perceived as a separate phase as in quantitative research” (Burgess, p.20). Potter and Wetherell (1994, p.184) even suggested that the term ‘analysis’ is questionable in qualitative research in general, because it “relates to a distinctive set of procedures that belong to the discourse of quantitative research”.

Bryman (2008, p.366) outlines the key features of qualitative research including its “inductive view of the relationship between theory and research”. Therefore it must be emphasised that this is a case study of the CUL and cannot necessarily be applied to other Higher Education institutions (Bryman, 2008, p.5).

Therefore, the methodology for this research consists of an indicative literature review, four interviews with key persons responsible for e-book provision in CUL whilst CUL is taken as a case study.

The literature review has provided knowledge on the subject of e-books, and enabled gaps in previous research to be identified. Also, the literature review served as a tool to find out about previous studies, and their contributions, and it helped provide a framework for work. Further it provided some perspective on how the subject of e-books became established and has developed. Most importantly, through debate on the e-books management topic, the literature review provided a means to identify general areas of concern.

As identified in the introduction, numerous studies have been conducted and researched the usage of e-books (Ashcroft, 2011, Brown, 2009, JISC 2009,

Armstrong & Lonsdale, 2009, Miller & Pellen, 2009, Polanka, 2011, Vasileiou, Rowley & Hartley, 2012, Walker 2014).

In recent years as e-books grow in popularity in academic libraries there is more research being done on their impact (Holden, 2010, Minčić-Obradović 2011, Nelson, 2008, Armstrong, Edwards, & Lonsdale, 2002).

A great deal of research has been done concerning e-book adoption, both that of users' (Booth, 2009, JISC 2009, McKiel, 2008, Rettig 2002, Rowlands, 2007) and librarians' (Anson & Connell, 2009, Burton, 2013, Information Automation Limited, 2009, McKiel, 2007, Newman, 2010).

The literature review identified challenges associated with e-book acquisition, access and promotion as general areas of concern and recognised that "managing e-book collections is a challenging task" (Minčić-Obradović, 2011, p.9). It also allowed "identification of methodological traditions which in turn helped to identify data – collection techniques" (Hart, 2011, p.24).

3.1 Primary study

3.1.1 Research design

The methodology is qualitative, based on semi-structured interviews conducted with four key persons responsible for e-books administration at CUL. The interviews as a data collection method were focused on practice and experiences with e-books and were subjective in nature, but suitable for this research as they highlight all the challenges that librarians face in this particular library. As e-books topic are a broad subject only three main stages: acquisition, access and promotion were explored.

Based on the findings from the interviews the case of CUL is built. CUL is taken as a case study as a means to explore the broader topic of how one library can face the future while building a larger user-centered collection. A case study is an effective tool for deep thought and analysis, offering a real life glimpse of

how one library dealt with difficult issues (Evangeliste and Furlong, 2014). However, this case study does not represent academic libraries overall (Bryman, 2004) due to its unique set up and because there is no general agreement on e-book management in academic libraries.

3.1.2 Case study

As Gray (2004) notes, “the case study method is ideal when a ‘how’ or ‘why’ question is being asked about a contemporary set of events over which researcher has no control” (p.124). Stake (2000) advises us to choose the case from which we can learn the most. CUL is taken as a case study, where since started in 2009 the e-book collection has been developing and new acquisition models are constantly being tested for the benefit of all parties involved in the process. It represents a good example of how the constant challenges associated with the three key areas which are at the centre of this study, are managed.

A single case study can provide rich detail about a phenomenon, and that is considered to be the great advantage of using a case study for research. “A contemporary phenomenon within its real-life context in which there will be many more variables of interest than data points” (Yin, 2008, p.18).

The major weakness of the case study as most cited by its critics is “its lack of generalizability” (Connaway & Powell, 2010, p.80). Stake (2000) on the other hand points to the greatest strength of a case study, “the richness with which a particular setting or phenomenon can be described using this approach” (p.435) and as Darke (1998, p. 276), put it “the research findings, rather than contributing to theory development or testing directly, usually provide evidence for hypothesis generation”.

Yin (2003) noted that even though most case studies use direct observation, this does not have to be the only data collection method adopted. Case studies are a valuable research tool and as Paris (1988, p.136) points out, “the nature of the problem is the major determinant of the most appropriate research methodology”, and the case study is well suited to collecting descriptive data.

3.1.2.1 Case study design

The first step in designing a case study was to carry out thorough literature review. Earlier findings on three key areas important for this research; acquisition, access and promotion of e-books, have been summarised previously.

Identifying the unit of analysis “is the major entity that is analysed in the study” (Trochim, 2007, p.166). Three key points and units of analysis identified for this research were acquisition, access and promotion of e-books collection. When focusing on a single case, “the study is likely to take multiple perspectives by gathering data based on multiple units of analysis, then aggregating it to understand the case that is the focus of the study”(Trochim,2006, p.167).

Case study results can be directly applied to the improvement of information and library practice (Bryman & Burgess, 1994), which is the aim of this research.

3.1.3 Data collection

3.1.3.1 Semi-structured interviews

Semi-structured interviews were chosen as the main research method. Cannel and Kahn (1968, p.530) defined an interview as “a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information and focused by him on content specified by research objectives”. Thus, the interviews were focused on three stages of e-books management in order to reflect the current situation regarding e-books in CUL. The open-ended questions are not limiting the interviewee’s choice of answers (Gubrium & Holstein, 2002) and the aim was to discover the interviewee’s own framework of meanings. On the other hand the research task was to avoid imposing the researcher’s structures and assumptions as far as possible.

Semi-structured interviews were a suitable data-collection method for this research as this type of interview has predetermined questions, but the order

can be modified based upon the interviewer's perception of what seems most appropriate. As all four interviewees held considerable knowledge and experience on the e-book subject each set of questions consisted of essential questions and additional were included depending on respondents' expertise. Particular questions which seemed inappropriate with a particular interviewee were omitted, or conversely additional ones included. Semi-structured interviews give the interviewer considerable freedom to adjust the questions as the interview goes on and to probe far beyond a particular respondent's answers to the predetermined questions. Compared to structured interviews, semi structured interviews are less rigid and allow more leeway than structured interviews (Connaway & Powell, 2010). Semi-structured was deemed more appropriate than unstructured as it is more organised and systematic in developing conversation. The main advantage of interviews overall is "that the interview is better at revealing information that is complex" (Robson, 2002, p.270) and that the personal contact also provides a greater capacity than the mail or an electronic questionnaire for the correction of misunderstandings by participants.

All three interviews were structured in the same way and consisted of essential, extra, 'throw away' and 'probing questions'. Essential questions were used in the main body of the interview, eliciting the key information related to the research question. Extra question were also used in the main body of the interview in a similar way but with different wording in case of confusion with the original question. 'Throw away' questions were not crucial in collecting information and were used to switch question focus throughout the interview. 'Probing' questions were used throughout all three interviews as appropriate to elaborate on respondent's answers, to elicit more information from the subjects on a specific question.

Most researchers acknowledge the interactional character of the interview. In contrast, Briggs (1986) argues that interviews fundamentally, not incidentally, shape the form and content of what is said. Holstein & Gubrium, (1995) claim that respondents are not so much repositories of experiential information as they are constructors of knowledge in collaboration with interviewers. Hence

this approach does have its failings, but in this research it was felt to be the most appropriate method.

3.1.3.2 Interview schedule

All interviews were arranged well in advance by email. Each participant was informed about the research nature and asked for consent to be interviewed (Appendix A). Closer to the interview date, reminders were sent. The fourth interview had to be rescheduled to a later date, due to the participant's very busy schedule at the end of the Michaelmas term.

The most appropriate locations for all four interviews, as chosen by participants, were their offices. The office settings allowed them to feel relaxed and not distracted in any way. Also, to "avoid interviewer bias all the interviews were held in a private setting, and kept as informal as possible" (Connaway & Powell, 2010, p.170). The purpose was to provide a setting where the interviewer and interviewees could discuss the topic in depth (Vasileiou, Rowley & Hartley, 2012). They were all willing to participate and they are not considered in any sense to be a vulnerable group.

All interviews were recorded with the interviewee's permission and then transcribed in full, to elicit the information, facilitate subsequent analysis and to prevent loss of data. Transcription of the interviews is given in the Appendix B.

3.1.3.3 Piloting

The pretest provided the respondents with ample opportunity to comment on the questions and even if all the participants were experienced interviewee "they need to become familiar with the researcher's particular questions" (Connaway and Powell, p.170)

The compilation of interview questions was built on previous research by Burton (2013) and Walker (2014). Each set of open – ended, semi structured

questions was designed to suit each participant's role and four interview schedules were drafted.

3.2 Problems and limitations

The main limitation of this type of research was time. One interview had to be rescheduled twice which slowed the whole process. All four interviews needed to be fully transcribed and analysed later.

Although, a greater number of interviews would build more detailed case study, all participants in the study were willing to participate and their expertise and experience revealed how the CUL dealt with the management of e-books collection in regard to three main stages: acquisition, management and promotion.

As encountered in previous research by Walker (2014), where no information on participants' background was gathered and there was no response to particular questions that was not limitation for this research.

Another limitation was the space limit of the study. For this reason some issues which are associated with the e-book management are not studied in depth here, but just briefly mentioned, for example: use of mobile devices and e-readers, use of VLE in accessing e-books and use of emails in the e-books promotion.

Chapter 4: Results

4.1 Introduction

This research generated a rich seam of insights on each of the stages in the e-book management process. This chapter presents a summary of the key findings focusing on the problems experienced at each acquisition, access and promotion stages at CUL.

4.2 Acquisition

Acquiring e-books for undergraduates and research students pose similar challenges. Although, budget issue is always of consideration it is not the main challenge. *“The price is not everything and there are other things to consider: storage, processing and currently in CDD division we are taking approach that if the price of e-book and print are similar, then we buy e-book”* (Interviewee 1). *“We should justify why we buy e-books and we should think”* (Interviewee 3). There are separate budgets for undergraduates and research students. Provision of books for undergraduates (mainly from reading lists) is managed by the ebooks@cambridge project, and the funds are coming from three different budgets: Colleges, Faculties and CUL. The project is a central ebook department to the UoC, and *“it’s a constant juggle for money, as different libraries, individual set-ups and budgets need to be catered of”* (Interviewee 1). But, at the same time this unique set-up of *“different pots of money, allows us to transfer money from one pot to another, where is most needed”* (Interviewee 1). Collaboration allows for a user-centred collection to be built and more e-books across different subjects to be available to students. While acquiring research books excluded from legal deposit *“there is \$200 price cap and only if the e-book is too expensive, we buy print”* (Interviewee 3). As for non- print legal deposit, budget of course is not an issue, but *“publisher’s willingness to deposit, and we talk to them about preferences. More and more academic*

publishers are keen to deposit electronic copy” (Interviewee 3). Publishers recognise that depositing an electronic copy can work to their advantage and *“example of Taylor & Francis and Routledge who have e-books already available on their platform and now make it available on BL platform”* (Interviewee 3) is just the beginning and is expected to take off in a very near future.

A more complicated issue in acquisition is where to buy e-books, from the publisher or a supplier. All interviewees recognised this difficulty and it is not only the price that needs to be considered. *“Suppliers are more fluid while publishers are more difficult”* was an observation made by Interviewee 2 and echoed by all the other participants. *“Dawsonera is an efficient way of spending money but there is a good collaboration with aggregators such as MyiLibrary and ebrary”* (Interviewee 2). The simplicity of ordering with these suppliers plays to their advantage: *“the ordering process via their ordering system is more managed and workflows are then easier”* (Interviewee 1). There is no complete e-books database as highlighted by all interviewees so the process consists of checking each supplier’s website to establish availability. *“You have to discover if the publisher is making it direct just for an individual purchase or, for an institutional purchase”* (Interviewee 1) and the process is time consuming, which is of great importance as there is an insufficient number of staff, the problem highlighted by all interviewees. Another problem is the availability of e-textbooks for undergraduates, but not all the subjects are affected in the same way. Interviewee 1 highlighted that *“there are a lot of e-book titles available for social sciences but that is not the case for all subjects, biological sciences as example”*. To resolve this challenge collaboration is seen as a solution: *“the support we receive from academics is essential for the growth of the e-books collection”* (Interviewee 2) but also the collaboration with suppliers *“we tend to email suppliers and aggregator suppliers quite regularly, if the book is not available anywhere”*. Buying from publishers can have advantages, as they typically place less DRM on their e-books. In Cambridge a large number of titles from CUP are bought direct from the publisher on their platform, Cambridge Books Online. Working directly with publishers opens up space for negotiations and flexibility is the key to future success.

4.2.1 Different purchasing models

4.2.1.1 Individual titles and packages

New models of acquisition are constantly tested to find out which models and suppliers have worked best and why. Both e-books for undergraduates and for research students are bought in number of ways. There are options for buying individual titles and packages. Considerably small percentages of collections are bought individual titles, and they are usually reference works and readers' requests. *"The amount of processing e-books is minimum"* (Interviewee 2) and is taken into consideration, beside budget, into choosing purchase model. Buying packages is attractive for CUL as there are discounts *"when buying the whole collection, or yearly output of the publisher, as we did with Brill"* and *"even with the VAT, Brill e-books package was considerably cheaper"* (Interviewee 2). Looking into usage statistics is often of assistance when deciding whether to acquire a package or opt for a new model such as DDA or EBA if a considerable percentage of the collection is not well used. However, one large package that Cambridge subscribes to is ACLS Humanities collection. For £1000 a year there are 4000 titles, and even if 70% of the collection is not used, it still justifies buying the collection (Interviewee 1). On the other hand, ebooks@cambridge encountered a problem with e-textbook availability, as not all the *"publishers are willing to licence core textbooks, as they fear losing print sales"* (Interviewee 1). Primarily, e-book availability influences the decision on the most suitable purchasing model.

4.2.1.2 DDA, EBA and PDA

It is not only for the library's benefit that different and new acquisition models are tested. *"We are not here just to make life easier for ourselves; we are here to provide better life for academic community"* (Interviewee 2). The main advantages of models such as DDA for users are the delivery of quick access, anytime and anywhere and that *"around half of the e-books have concurrent*

access” (Interviewee 2). Delivery of access is especially of consideration when buying research, academic books which are normally excluded from legal deposit and had to be bought elsewhere. *Sometimes for print books it can take weeks, or even months to buy specific book and then it needs to be processed. While for e-book we can do it as quick as half an hour*” (Interviewee 1). Therefore, this is a key reason for choosing new models such as DDA and EBA when buying e- books for both undergraduates and research.

At the moment a DDA model is running very successfully in Cambridge, with Ebrary for research books. CUL is acquiring e-books in demand in the arts, humanities and social sciences for research students. Setting the profile is *“quite granular and detailed, which is good so we don’t buy books we don’t need”* (Interviewee 2). Once the subject profile is set up, outlining titles for which there will be access; a price cap of \$200 is assigned and single user licence is the default. As highlighted by interviewees the greatest advantage of DDA is that *“there are around 50% single user licence e-books, they can be automatically upgraded to multi-user access, if for example two users want the same book they can trigger the upgrade”* (Interviewee 1). The flexibility of the model cuts the costs as anything not needed is excluded from acquisition. Ebrary’s evidence suggests that around 90% of e-books don’t need multi-user access at all.

CUL also has EBA model running with Wiley and CUP and is just about to start another with De Gruyter. As with DDA the deposit is paid for the collection, or the entire publishing output upfront, but a time scale is set to look at the usage. *“By the end of the year we use the deposit to buy what we want to keep and usage statistics tell us exactly what books have been used. But, if we want to carry on with EBA next year, there is even no need for removing unused titles”* (Interviewee 1). Again, not only the cost of an e-book but also the time to analyse usage is of consideration when opting for this acquisition model.

Both models work well for CUL as purchases are directly tailored towards users’ needs, there is less processing work, and the deposit is paid upfront so even if the price per book is higher, *“considering other advantages, it is good value for money”* (Interviewee 2). Justifying the shift toward DDA Interviewee 2

gave an example of the process works *“acquisition of 178 books for \$15 000 with only one purchase order and one invoice, as deposit is paid up front. That purchase order and that invoice was all the processing work; there was no need to process the book, no need to process the invoice”*.

In a way the models are similar to subscription but the library only pays only for what has been used.

The PDA model is also tested, and there are key differences between DDA and PDA models. While in DDA acquisition is put more in the hands of the library, in PDA the decision is more with the users. For acquiring research e-books DDA is definitely preferred model while for undergraduates PDA is constantly tested. In 2013 there was a PDA trial with Dawson books where users triggered the purchase either by reading the book for more than 5 minutes or three previews of the book were made (Kelly, 2013, p.3). The subject fields chosen for the DDA were Education, Philosophy, Anthropology and Archaeology and further filters were applied, such as readership levels and a price cap so, *“only stuff we really wanted to obtain were purchased, we didn’t want to purchase stuff we didn’t want to spend money on”* (Interviewee1). The analysis of the PDA is still on as there are disadvantages (removing titles after the PDA was over) and advantages (efficient way of spending money) (Kelly, 2013, p.5)

4.2.2 Electronic Legal Deposit input

“Electronic legal deposit copyright is very restrictive” (Interviewee 4), with it not being possible for CUL to allow readers to borrow. *“Electronic copyright will hit us very hard”* (Interviewee 2). The use of electronic copyright titles can only be in the Library and on dedicated readers; there are restrictions on printing and downloading, too. *“At the moment for some users e-legal deposit books might be useless, so we have to buy a copy anyway”* (Interviewee 2). A review on the Electronic Legal Deposit input is scheduled for 2017 and *“it is too early measure its contribution, as the deposit started in April 2013. But, it is expected to really take off as more and more publishers are very keen to deposit”* (Interviewee 4). The list of publishers currently depositing is given in Appendix C.

4.2.3 Conclusion

Overall, there is a shift towards buying books on demand and buying books “just in time” instead of “just in case” both for undergraduates and research students in CUL. The participants highlighted advantages of acquiring e-books as they “*are financial asset*” (Interviewee 2), and “*they don’t go out of print*” (Interviewee 1). But it must be emphasised that there is no universal acquisition model that works best for all involved parties, CUL library, suppliers and publishers. For all of them close collaboration is the most beneficial “*There will be much more telling data in the future as new models are fairly recent*” (Interviewee 2). And indeed, at the time of conducting this research full-text access to the Astronomy, Chemistry, Earth and Environmental Sciences, Physics, Statistics and Probability material (altogether 1046 coursebooks) of Cambridge Books Online collections as part of EBA deal, has been opened up (ebooks@cambridge, 2014c).

4.3 Access

Although the situation with access is improving due to rapid technology developments, there are still issues to be resolved, as recognised in the interviews. The main acknowledged concerns with access to e-books were: variety of platforms, authentication problems, DRM issues, discoverability and records quality. For electronic legal deposit the main identified issues was how to provide better access and quality of metadata.

As discussed before, these issues are affecting the decisions on acquisition too, as “delivery of access is great importance to users and can affect their decision whether to opt for e-book at all” (Interviewee 3).

4.3.1 Range of platforms

Users at CUL are exposed to a variety of platforms “*which is not necessarily a bad thing to have more and more suppliers, it is brilliant as there is more variety*

of titles” (Interviewee 2). Currently, there are around 60 different platforms for undergraduates and research students altogether. They all have different appearances and features, and the problem of understanding their complexity is experienced in CUL by both users and staff. Staff working at CUL with e-books know that the *“key features are the same, although they might look different”* (Interviewee 3). For this reason, ebooks@cambridge offers training for users and librarians which will be discussed in the next chapter. *“The main focus is on the staff training so they can advise users”* (Interviewee 2).

There is also an issue regarding concurrency of access, potentially blocking users from accessing content if heavily used. Around half of e-books have concurrent access according to the ebooks@cambridge project. Part of the problem is solved by automatic upgrade to multi-user access, which is possible in DDA but not with all models. It is reported that concurrency of access is more of a problem with e-books for undergraduates than for research students. *“(We) found out that around 90% don’t need multi-user access [research students]”* (Interviewee 1).

4.3.2 Authentication

(In order to gain access to material authentication is required. To simplify things for users both Shibboleth and proxy server are used in Cambridge. *“We only sign up with suppliers that use Shibboleth”* (Interviewee 2). Users should not have problems accessing e-books off campus, as the EZProxy link is put in front all URLs, so there is no institutional login for users. They are prompted to enter a Raven username and password and it requires minimal effort. *“Occasional problems arise, due to reliance on IT”* (Interviewee 2).)

At the moment the main problem is with legal deposit e-books. Not only that authentication is required, but that the access is allowed on dedicated terminals in the library only. There are improvements on the library interface though and the restrictions on printing are lessened. *“As a fairly recent [e-legal deposit]...it is expected that it will take off in the next couple of months. The access can be improved with the reader that BL is developing...”* (Interviewee 3).

4.3.3 The library catalogue and record quality

The library catalogue is an access point as well as promotional tool. All participants confirmed that users primarily locate e-books through the library catalogue- *“mainly LibrarySearch, on and off campus”*. CUL also developed a portal ‘Libraries Gateway’ which allows users to search LibrarySearch, others catalogues, electronic resources and e-books in particular (University of Cambridge 2014e). There is also an in-house VLE, CamTools. The feeling is that CamTools is not utilised to its full potential, although *“we have reading lists with links to e-books included and sometimes it is very time consuming task”* and greater collaboration between academics and librarians is needed. Accessing e-books through the ebooks@cambridge webpage is another route, or alternatively directly through suppliers’ websites.

Concerning the records there are two main problems encountered in Cambridge. First, with the bulk loading of records in the library catalogue there is a time difference between the availability of e-books on the supplier website and delivery of MARC records. But, *“it’s time saving and simplifies the process”* (Interviewee 2) and even with the encountered problems it is preferred model of loading records. Manual loading is used rarely, just for the most important titles and *“it does have advantage as it can be done immediately, but it is labour intensive”* (Interviewee 2). The second problem is the quality of records. When purchasing large batches of titles and receiving records from a supplier the quality of records can be questionable. There is no authority checking for e-book catalogue records as long as there are key access points, but the quality of some records is bad (Interviewee 1). Cataloguer intervention is often needed. The recently introduced cataloguing rules mentioned previously, RDA, should improve the discoverability and searchability of records as they are designed for electronic resources (Kelly, 2012). At the moment, the situation in Cambridge is that e-books are coded in both, AACR2 and RDA, but as more and more suppliers provide RDA records over time *“they might not be perfect, but good enough for use”* (Interviewee 1). The same problem is with e-legal deposit where the quality of metadata is very poor *“but they are upgraded later”* (Interviewee 3) and the situation is seen as improving.

4.3.4 DRM

The issues with DRM are best tackled if buying e-books directly from publishers, as confirmed by all the participants, whether acquiring Tripos subjects or research titles. Suppliers use DRM restrictions to prevent copyright abuse as there are limits on printing or copying hence “*[restrictions] might be confusing to users*” (Interviewee 2). Confirming these findings, at the time of writing “*Dawsonera have informed the ebooks team that Pearson have altered their digital rights on all of their e-books. As a result, Pearson content is no longer available to download, and users can only access their content online*” (Interviewee 2).

Although off putting for users, “*violation of DRM haven’t been reported*” (Interviewee 3).

4.3.5 Access for visually impaired users

The ebooks@cambridge Service is working closely with Disability Resource Centre (DRC) to help visually impaired users. The e-books team is checking the reading lists of disabled students and “*after checking what we have as an e-book, we go through checking how suitable it is for disabled users*” (Interviewee 2). If it is unsuitable then the e-books team contact the publisher usually asking them to provide a PDF file, and “*usually, they are cooperative*” (Interviewee 1). If not, as a final solution “*we scan the title, although it is a time consuming*” (Interviewee 2). It is essential to focus more in answering disabled users’ needs. Rapid technological developments are part of the solution as new readers emerge and facilities such as text to speech develop further.

4.3.6 Conclusion

Regarding access to e-books this research concurs that there is great reliance on IT and technology developments, especially concerning authentication issues and access for disabled users. While the authentication process requires minimum effort, that is not the case with electronic legal deposit e-books. They can be accessed on dedicated terminals in the library only. Participants in the

study are not quite satisfied however *“it is fairly recent and the possibility of new reader will be highly beneficial to us and users”* (Interviewee 4).

Heavy reliance on the library catalogue for discovering e-books is confirmed, although the e-books web page is growing in popularity due to team’s efforts in promoting it. The quality of records is another concern, as there is great reliance on suppliers’ records. They are often identified *“not of good quality, but as long as they have main access point, they are good enough”* (Interviewee 2). In accordance with this opinion is the priority to provide discoverability of new titles as quickly as possible.

Through collaboration with the DRC and publishers, the ebooks@cambridge team is facilitating access to e-books for disabled users. As pointed out working closely with publishers is essential as is the provision of more suitable resources.

4.4 Promotion

An array of traditional and new tools is used in Cambridge to raise awareness and assist in the use of e-books. Traditional tools (given in Appendix 5) *“are important as different users need to receive different promotional tools”* (Interviewee 2) and the use of social media is *“not replacing but complementing them”* (Interviewee 4).

4.4.1 Traditional methods

To bring e-books closer to their users, CUL makes good use of traditional promotional methods: posters, bookmarks, stickers, slides for display screens. These methods utilised *“similar to promotion of print”* (Interviewee 4) and are *“eye-catching and definitely raise awareness among all users who come to the library”*. E-legal deposit posters are displayed in the library and Affiliated libraries as well, although *“they are hidden at the back and we’ll definitely put more effort into promoting them elsewhere”* (Interviewee 4). Traditional

methods are regarded to be a starting point in promotion as the emphasis is put more on staff and user training.

4.4.2 Training

In CUL training is seen as essential in promoting e-books as it educates users and increases usage. Their aim is to educate both librarians and users. While doing the training for users the emphasis is put on the features and functionality of the platforms and how to locate them in the catalogue. *“The more they feel comfortable with different platforms, the more they use them”* (Interviewee 1). There are slight variations; the training is tailored to suit different user groups. *“We run follow up to induction sessions, then regular drop-in sessions, and since recently we started with additional trainings in our Reading room”* (Interviewee 2).

Training for librarians is organised to be at the beginning of each academic year and regularly in the form of drop-in sessions. They are structured slightly differently and are aimed at all Cambridge librarians, not just those from CUL. The formal training equips them with sufficient knowledge to consider incorporating e-books in their collection and to encourage and assist users in their use. In addition, there are regular drop-in sessions if any problem arises. *“They are very informal, we have different queries, general or very specific and they are open to everyone”* (Interviewee 1). The sessions are complemented with video tutorials and are not only promoting library e-book collections but for *“bringing library closer to the users”* (Interviewee 4). Video tutorials are not part of the e-books team’s engagement in social media and proved to be very *“successful among users”*(Interviewee 2).

4.4.3 The role of the Library Catalogue

The general feeling in Cambridge is that the main approach in finding e-books is through Library Search. It is also a marketing tool, so uploading new records quickly is of high importance. With more than 6.5 million records, including e-books, it is *“very usable and responsive”* (Interviewee 2). New e-books are uploaded into the catalogue as quickly as possible. *“Some publisher’s titles will*

not yet show up in a search, so users are forced to use their websites” (Interviewee 3). And again the issue with the quality of records arises. The catalogue relies on metadata loaded for each individual e-book title but some e-book collections only have metadata available for the collection rather than all the titles. The quality of metadata is recognised as a problem for e-legal deposit, as recognised earlier.

“Finding an e-book should be a straightforward process and provide true browsing experience” (Interviewee 4) so constant efforts are put into improving the library catalogue. The addition of book jacket images contributed further to e-book promotion on the e-books website.

4.4.4 Social media

The results showed that different types of social media are used to interact with users and promote new services.

You Tube as a video sharing tool is very effective for tutorials and in answering specific reader’s enquiries. “The first question we have in trainings is if [readers] can have e-books on Kindle” and “about using particular devices in accessing e-books” (Interviewee 2). The e-books service tends to use You Tube to provide videos so users can practice in their own time. It complements training very well and goes beyond this as videos often provide more detail about particular question. In a similar way, Pinterest is used for marketing new books and is easily shared through e-mail link (ebooks@cambridge, 2014c).

Twitter and Facebook are mainly used to promote new resources and events, as are blog posts, which are usually more detailed. They are regularly updated and through the number of hits or followers the ebooks@cambridge service can monitor the audience. The results of this study also showed that the emphasis is put into promoting new acquisition and making important notices while more efforts need to be put into advertising e-legal deposit. *“[E-legal deposit] as fairly recent, with future improvements will be more publicised”* (Interviewee 4).

4.4.5 Library website

E-books are well promoted on the library' website (Cambridge University Library, 2014). Recently included book covers under the new books section give equal space to print and electronic. Further to this, there are links to the library catalogue and e-resources linking directly to e-books page. The general opinion of the participants in the study is that website is "*our users first place to check for a resource*" (Interviewee 1). Library web pages especially dedicated to e-legal deposit are the main promotional tool for its promotion.

4.4.6 Conclusion

A great deal of effort is put into promoting e-books using both traditional and new methods. While posters, bookmarks, stickers and trainings play an important role for users who visit the library, social media and the library website play an important role in engaging with students off campus and bringing the library closer to its users.

It is recognised in this study that e-books are developing rapidly and that a mixture of both traditional and modern methods is the most effective approach when promoting e-books and educating users. While e-books for undergraduates and research students are well promoted it is recognised that more efforts need to be put into promoting e-legal deposit. Also, there is no written strategic plan or guidelines on how to promote e-books. As pointed out by participants there is a recognised need for a written policy on e-book management, including guidelines on promotion.

Chapter 5: Discussion

5.1 Introduction

In this chapter the research aims set out in chapter 1 will be fully discussed in the light of the findings outlined in the chapter 4. The overall aim was to examine the three stages of e-book collections and to do so the following research questions were set out in the chapter 1:

- Main issues associated with e-books acquisition
- Issues affecting e-books access
- Ways of promoting e-books

Chapter 2 assisted in identifying general areas of concern in e-book management and also advised methodology. The case study of CUL revealed how one specific library dealt with these issues, while the information was gathered by conducting semi-structured interviews. The analysis is structured around each theme separately and contextualized with respect to previous studies.

5.2 Analysis

5.2.1 Acquisition

The scholarly literature identified many issues associated with acquisition. The main identified challenges were: the budget, the variety of purchase models, a plethora of platforms and the choice between publishers or aggregators.

The findings of Vasileiou, Rowley and Hartley (2012) study which are in consistence with the results of Anson and Connel (2009), which identified the allocation of a separate budget for e-books as a key factor. The results of this study concurred that this was not the case in CUL library thanks to a unique set up of separate budgets. This is demonstrated by the fact that the e-book@cambridge service is collaboratively funded by almost all Colleges,

major Faculties and Departments and the University Library. In addition to this there is a separate budget for research books funded by University Library.

Predictions are that in Cambridge there will be an increase in spending consistent with the literature that indicates that in spite of the current economic situation, a large number of libraries will increase e-book spending in the future, examples of Plymouth University (Gee, 2014), Coventry University Library (Forster, 2014), University of Portsmouth (Worden, 2014). However, currently library spending on books is still dominated by spending on print as reported in the Annual Library Statistics published by the Society of College, National and University Libraries (SCONUL, 2013).

Both the literature and this research concurred that the availability of e-books is among the main issues affecting acquisition (and for some the biggest, results shown in Newman's (2010) research, and University College London, (2009) findings. As discussed, a range of tools are employed by librarians in ascertaining e-book availability. The findings of this research are in line with, Vasileiou & Rowley (2012) and Armstrong and Lonsdale (2003) that the discovery of e-books is hindered by the lack of sources that advertise e-book availability across the platforms.

Considering different purchase models it is obvious that libraries use traditional models such as buying individual titles or packages, whilst also putting acquisition in the hands of the users with new models such as PDA and similarly DDA. Use of the new models revived the question about who the library collections are for and whether to opt for "just in case" or "just in time" acquisition. In answering to the question literature put an emphasis on the user's need while recognising library's responsibility to preserve material for the future.

It is worth noting that results in earlier research such as Lonsdale and Armstrong, (2003), and McKiel (2007) expressed greater concerns over complexity of different purchase models. It seems that there has been a shift in recent years. The research of Paulson (2011), Steiner & Berry (2011) and Dillon (2011) investigated the implications of building collections with PDA as

preferred model. They recognised a library's ability to partner with and trust the library user as their greatest strength. At the University of Sussex (2014) PDA is used to complement ILL requests for users. For a number of libraries experimenting with PDA model was successful and they will use it in the future, University of Leicester, (Fyfe, 2014), University of Portsmouth, (Worden, 2014). As discussed above, CUL is experimenting with the success of DDA, especially for research books and with both PDA and EBA for undergraduates. The importance of collaboration between publishers and libraries is gone step forward. {In accordance with findings mentioned above, the importance of further collaboration between libraries and publishers is accentuated for the benefits of all parties involved.}

To what extent will each library choose their preferred model depends on what benefits it brings to the library and for the users. While the shift towards DDA is obvious for buying books for research students, it is not the main model when choosing books for undergraduates. The idea of preserving the material for the future is also strongly recognised in CUL and taken into consideration when choosing the purchasing model. The importance of e-legal deposit is expected to play even more of an important role in these decisions.

5.2.2 Access

Case studies confirming that the uptake of e-books would be increased if there was single platform are numerous: Dundee and Angus College (Scott, 2014), University of Liverpool (Bucknell, 2012), University of Leicester, (Fyfe, 2014), Newcastle University (Taylor-Roe, 2012). The variety of platforms can be off putting to users as they all have different appearance and features. Often, the complexity of e-books platforms are compared to the sophisticated platforms of e-journals (Johnson, 2013, Polanka, 2012) and these researches confirmed that users expected the same of e-books. They all expressed strong views about the need for standardisation across the range of suppliers' platforms.

The multiplicity of platforms and variety of features are recognised issue in CUL surrounding access. The findings showed that lots of effort is put into training and into communication with suppliers. The reports from the case studies

mentioned above are in accordance from results in CUL and they all stressed the importance of providing feedback to the suppliers.

Access anytime and anywhere is recognised as the main advantage of e-books. However, the ability to download the title and read it at a later time is an important requirement according to the participants in this study, and highlighted in the research of Ashcroft (2011), Scott (2014), Grace & Needham (2014) amongst others. The general conclusion concerning this issue is that DRM restrictions are one of the main factors to hinder users in their usage of e-books. CUL has found a partial solution by acquiring e-books from publishers where possible.

Another issue identified is authentication. Shibboleth is the main access and authentication system used across libraries in UK, including CUL. Cox & Carden (2010, p.8) emphasised that the situation with authentication has improved a lot since 2006 “when over a third of colleges have yet to become Athens or UK Federated Access Management (Shibboleth) compliant”. Rapid developments in technology are expected to have an impact on accessing e-legal deposit material in CUL where beside authentication, access is available on dedicated terminals only. As results show it is very frustrating for users and has impact on usage.

Most commonly libraries provide access to their material through their websites and OPACs. The literature stressed the importance of quality records (Armstrong and Lonsdale, 2005, Dillon, 2001, Newman 2010) and the findings are in line with the results of this research. While there are differences in practice between libraries in integrating records into OPACs, the supply and quality of suppliers' records is seen as a key issue. A range of problems encountered in CUL include issues with e-ISBNs, invalid URLs and generally poor quality records from some suppliers. These results are in line with Information Automation Limited's (2009) findings which concluded that publishers, aggregators and librarians should work together to establish consistent records for e-books.

E-books have the potential to meet a very wide range of accessibility needs and provide equal access to everyone (Ashcroft, 2011, Johnson, 2013, Naught & Alexander, 2014, Polanka, 2012). All the parties involved in the provision of e-books need to be aware what benefits accessible text can bring to all group of users. The results of this study found that obtaining adequate files from publishers is an issue. However, it must be emphasised that great efforts are being made by some publishers. The case study of SAGE, in the research of Naught & Alexander (2014) revealed how the provision of files to the visually impaired and print disabled users became a priority for them. "The process became a one-stop service whereby the librarian requested the content and [Sage] would deliver as soon as possible (the record being within two minutes of receipt) (p. 43).

5.2.3 Promotion

This study has found that the marketing of e-books is considered to be essential; however there is no formulated marketing strategy in Cambridge. This practice is confirmed by some other research such as Vasileiou, Rowley & Hartley (2012) who had the same results from seven university libraries they surveyed. In contrast, Information Automation Limited (2009) study revealed that a number of university libraries have strategies for e-resources. In line with this, it was recognised in this study that establishment of marketing strategy is needed.

A mixture of traditional and new tools is used in e-book promotion in Cambridge to reach different groups of users. As results highlighted previously, not all methods suit all users, and attention also needs to be paid to users who don't visit the library. E-book web presence and promotion is equally important as promotion in the library building.

Traditional tools that include posters, bookmarks, flyers and new tools such as web sites, library catalogues, induction sessions and training are cited as used by participants in this research. The findings are in line with those from libraries that either had not formulated a strategy as mentioned in Vasileiou, Rowley & Hartley (2012) or had one as in Information Automation Limited (2009). The

importance of the library catalogue is highlighted and past research (Armstrong & Lonsdale, 2005, Dillon, 2001) showed that the inclusion of e-books in catalogues was related to higher e-books usage. The general feeling in Cambridge is that from all the tools, the VLE is not utilised to the full and the solution to this could be realised through greater collaboration with academics. Similarly, Armstrong and Lonsdale (2003) suggested that academics have a pivotal role in promoting e-books through recommendations, including e-books links in reading lists and linking from the VLE.

It can be concluded that an array of tools is used across libraries and there is evidence of the growing significance of training delivered either in person or through social media. Their popularity is evident in Cambridge, and Worden's study gives the example of the University of Portsmouth (2014) and Vasileiou, Rowley & Hartley (2012) confirms the same in their research.

5.3 Conclusion

Overall, the analysis has confirmed that the e-books management process is still very complex. The findings, in terms of issues surrounding acquisition, access and promotion aligned with those of past studies that investigated the management of e-books, while offering insights into practice in CUL.

In terms of acquisition the main issues associated with this stage are:

- budget,
- availability
- discoverability
- choosing the appropriate purchase model.

An analysis showed that further expansion of the e-book collection is expected and that there is a need for an increased budget, especially for providing core texts. In terms of availability and discoverability the analysis demonstrated that improvements are made in collaboration between libraries and suppliers. There is a need for more textbooks and e-book suppliers should enhance their communication with libraries and put more effort into promoting e-book availability. Regarding e-book purchasing models, new models are constantly

being tested. The preferred model in acquiring books for graduates in CUL is DDA while a variety of models are used in acquisition for the Tripos subjects. This obvious shift towards DDA is not typical for all academic libraries, but the literature showed that there are a growing number of libraries who are experimenting with it, Leicester (Fyfe, 2014), Portsmouth (Worden, 2014), as mentioned above. This highlights the differences in users' needs and difficulties in choosing the most beneficial model. Another issue specific to CUL is e-legal deposit. Predicting what will be received in this way is not straightforward and needs to be monitored constantly.

The main access issues arise from:

- the variety of platforms
- authentication problems
- DRM
- the quality of records provided by suppliers
- access for disabled users

The analysis confirmed the need for platform standardisation. In CUL, training for both users and library staff, explaining features of specific platforms, eases the problem. However, further communication and collaboration with suppliers is needed. Regarding authentication the situation is seen as improving. Although, in CUL problems are still reported due to the heavy reliance on IT, since Shibboleth was introduced the authentication process has been simplified. The main issue this study revealed is a concern over access to e-legal deposit material. It must be emphasised that e-legal deposit is at early stage of development and further developments are expected. This is the area that is developing so fast and the latest improvement in terms of access is that the home page for the terminals will display the terms and conditions for access. Only once these have been accepted by the user is the search interface available. Thereafter, the user will no longer be required to accept terms and conditions each time they consult an item, speeding up access. Finally, information about printing e-legal deposit material will be made available on the interface.

The same can be concluded about the quality of records. The situation is seen as improving, although the e-books service in Cambridge is still not completely satisfied with the quality, highlighting the importance of the inclusion of all main access points. The study identified this issue to be even bigger with e-legal deposit material where records need to be upgraded later. And finally, the issue of accessibility for disabled users is explored. The results demonstrated that this is the area where the potential of e-books is not used to the full. As shown in Cambridge, collaboration with publishers who provide files is of high importance. Nevertheless, the development of devices with improved features will have huge impact on access and also attract more user groups.

The analysis of promotion showed that across libraries a variety of promotional tools are used with more emphasis on new methods in recent years. When promoting e-books, the literature review and results of this study agree that two main issues are taken into consideration:

- Promoting e-books to users who don't come to the library
- Realising that promoting to different groups of users will involve using different tools

Traditional promotional tools are reported in the literature and regularly adopted in Cambridge. The results showed that training has risen in popularity as a method, and will be employed even more in the future. Further to this, more emphasis is being put into engagement on social media.

Chapter 6: Conclusion

6.1 Aims and Objectives

The aim of this research was to investigate the management of e-books collections in the main CUL. It was hoped to build a case study where the management of e-books purchased for undergraduates (under ebooks@cambridge team), and research students (under CUL), and received through e-legal deposit were investigated. The current practice was explored, which provided a clear picture of e-book management and allowed consideration of future advancements in e-books development and usage.

To fulfil the aim of the research, the objective was to ascertain the main issues surrounding e-books acquisition, access and promotion. Firstly, the nature of the collections was analysed looking at how books are acquired and highlighting issues with budget, discoverability, availability and different purchase models. Next, access issues were analysed with emphasis on problems with the variety of platforms, quality of records, DRM restrictions and investigation of obstacles for disabled users. Finally, promotion was analysed. In order to build a case study, 4 interviews were conducted with the key persons involved in e-book management at CUL.

6.2 Summary

In order to design a case study a thorough literature review was conducted. It summarised findings from recent research in the field of e-books, focussing on the acquisition, access and promotion stages. It first looked at the complexity of the e-book management framework and next highlighted issues with each of the three stages identified for investigation in this study. Because of the

complexity of the process there has been more research carried out on particular stages than on the management as a whole.

To gain the full benefit of this research semi-structured interviews were conducted to gain in-depth understanding of the problems surrounding acquisition, access and promotion of e-books in CUL. The methodology chapter justified the use of semi-structured interviews as a data collection method whilst the case study of CUL provided evidence of the current practice into dealing with issues relating to e-books.

The study looked at the acquisition first. Considering issues that affect acquisition, the literature put more emphasis on the budget and on different purchase models in particular, than on challenges with selection and availability. While it is recognised that clear guidelines on e-book management need to be incorporated into the CDP, it is stressed that establishment of separate budgets would facilitate decisions on the most suitable purchase models. Considering this issue, the literature pointed out that no best practice exists for allocating a budget for e-books. The findings on the same issues at UL were differed slightly. The management of e-books in CUL is unique as there is a distinction between research and undergraduate e-book collections, and there is the e-legal deposit input to consider.

In contrast to the literature findings where the acquisition budget was recognised as the main challenge, CUL experiences bigger issues with availability, especially of e-textbooks. Whilst CUL has no formal CDP for electronic resources, there are clear guidelines established by the ebooks@cambridge service when acquiring e-books. The primary source in considering titles for acquisition is reading lists, as was seen to be the case in many other academic libraries. In CUL, there is also the very current problem in identifying what e-legal deposit will be received. Through constant collaboration with publishers the hope is that the situation might improve with more publishers willing to deposit electronic copy, hence reducing acquisition pressures on CUL.

The challenge is also in deciding which acquisition models and suppliers provide the best service. The latest literature concentrated a lot on new purchase models which are tested in many academic libraries. Evidence from the literature suggests that the flexibility of new models has led to a gain in their popularity over traditional methods of acquisition, and the advantages of models such as PDA and DDA are emphasised. Issues with different platforms and the choice between purchasing from publishers or vendors are also of consideration. The usability and simplicity of platforms has an impact on user experience, while choosing to buy e-books from publishers or vendors adds new considerations such as cost and ensuring the service satisfies users' needs. The ebooks@cambridge service and UL Acquisition department have had a mostly positive experience with the aggregators Ebrary and Dawsonera so far, although they use many others to a lesser extent. There has also been positive feedback from using different acquisition models such as PDA with Dawsonera, and EBA with Wiley and CUP. DDA is currently running with Ebrary and is about to start with De Gruyter. For research collections there has been a shift towards DDA, while purchasing packages is still an attractive option due to their low price per title. Individual titles are rarely bought for research, an option saved for reader requests'. Considering e-legal deposit, academic publishers feel keen to deposit electronically, proven by the fact that over 10 000 titles were received this way in the first 4 months of this year. It is a publisher's choice whether to deposit electronically or in print. The challenge at the moment is what will be deposited and what proportion will be used.

The recommendation is that in resolving these issues closer collaboration is needed between all parties involved.

Next, the study looked at the access problems. The literature found that the usability of platforms affects access, and it is recognised as an issue in CUL. The main problem pointed out as causing confusion was that they all look different. It is expected that with further development of e-books some features of the platforms may improve in the future and become simpler to use, but they won't all look the same. In terms of access the most recognised issue in CUL was discoverability and the quality of supplied MARC records. The library

catalogue was highlighted as a main access point and the role of VLE is stressed as important. Issues with authentication and DRM were touched on lightly in literature, while in CUL authentication became much simpler for users when Shibboleth was adopted. The advantages of e-book features in terms of access for visually impaired users were emphasised further, while it was pointed out that there is still scope for future developments. CUL is collaborating with publishers on providing suitable formats for users with disabilities, although not all the publishers respond efficiently. The access problems are experienced above all with e-legal deposit. As identified, in CUL e-books received in this way can be accessed only on dedicated PCs, also found in the affiliated libraries.

As recognised, this is the area that needs the most improvement, both in the terms of access and promotion.

Finally, the issues surrounding promotion were investigated. Different methods used to promote e-books were discussed and evaluated. The literature discovered that traditional approaches used to promote print are regularly used in e-book promotion. However, new methods, such as using a library website and social media in particular, are gaining in popularity. This is also found to be the case in CUL. It was identified through looking at the different needs of its users that an array of different tools, both traditional and new, has to be used to promote e-books. The role of the library catalogue and website is highlighted, along with social media. The efforts that are put into training staff and users were emphasised. It was identified that e-books received by e-legal deposit are not promoted heavily enough, targeting just users who physically come to the library by relying on posters and leaflets.

The analysis allowed the identification of similarities and differences between the literature and the case study. Overall, the findings confirmed that of past studies, and offered additional insights into practice and challenges experienced at CUL.

6.3 Outcomes

The main outcome of this study was the identification of the main challenges associated with e-book acquisition, access and promotion in CUL. The study also revealed the current situation regarding the impact of e-legal deposit on e-book collections.

Resolving current issues associated with all these stages will contribute to a developing a more straightforward process in e-book management and potentially subsequently increase e-book uptake and user' satisfaction.

6.4 Recommendations for practice

Based on the findings, the management process in CUL is still very complex. The practice needs further development in all of the three stages. Considering acquisition, several obstacles that are unique to CUL as a research library need further considerations and improvements: establishing clear guidelines for acquiring e-books, close monitoring of the intake of e-legal deposit material and the reconsideration of budget and resource allocation. Formulation of a CDP would decrease these problems in the future.

In terms of access further development of the quality of records and easier to navigate platforms would improve user' satisfaction, while access to e-legal deposit is the area that needs improvements the most. Continuing to build relationships with vendors and consistency of usage statistics for e-books is essential in these matters, often outside the control of CUL staff.

Development of marketing strategies or implementing guidelines for the promotion of each collection would simplify the process. Improved collaboration with academics to increase their awareness of e-books would result in a greater intake of e-books by students. In particular, collaboration on e-books embedded in reading lists and the VLE could have positive impact on e-books usage.

6.5 Recommendations for further research

Despite the considerable research into e-book management in academic libraries, and the evidence of increasing e-books practice, there is scope for further research, as there are unresolved issues surrounding the different stages of the e-book management.

E-books change and develop rapidly and some of the issues mentioned in this study might disappear while new challenges may arise.

This research pointed out that in terms of all of the three stages mentioned in the study collaboration between academic libraries and e-book providers is essential. It would be interesting to see what changes the future collaboration between academic publishers and libraries will bring in terms of using different acquisition models and in particular how the shift towards DDA model will shape the entire research collection.

Future research into e-legal deposit, and to what extent it has an impact on e-book collections in Cambridge, would be useful and provide assistance into creating guidelines, or a CDP, for e-books provision. Comparing results with other legal deposit libraries might be useful, whilst an investigation into collaboration between legal deposit libraries and UK publishing community would reveal how they responded to libraries request to transition of depositing e-copy instead of print.

Bibliography

Anson, C. & Conell, R. (2009). *Ebook collections. SPEC kit 313*. Washington, DC: Association of Research Libraries.

Armstrong, C., Edwards, L. & Lonsdale, R. (2002). *Virtually there? E-books in UK academic libraries*. Retrieved from:
<http://cadair.aber.ac.uk/dspace/handle/2160/1809>

Armstrong, C. & Lonsdale, R. (2005). Challenges in managing e-books collections in UK academic libraries. *Library Collections, Acquisitions, and Technical Services*, 29 (1), 33-50

Armstrong, C. & Lonsdale, R. (2009). *E-books use by academic staff and students in UK universities: Focus groups reports*. Information Automation Limited. Retrieved from <http://observatory.jiscebooks.org/reports>

Ashcroft, L. (2011). Ebooks in libraries: An overview of the current situation. *Library Management*, 32 (6/7), 398-407. doi: 10.1108/01435121111158547

Bennett, L., & Landoni, M. (2005). E-books in academic libraries. *Electronic Library, The*, 23 (1), 9-16. doi: 10.1108/02640470510582709

Brown, L. (2009). *Ebooks and the academic library: Their usage and effects*. Master thesis – University of Wales.

Brunskill, A. (2012). Going digital but not bookless: Physical, digital library spaces. In *No shelf required 2: Use and management of electronic books* (pp. 1-16). Chicago: American Library Association.

Bryman, A. (2004). *Social research methods* (2nd ed.). Oxford: Oxford University Press.

Bryman, A., & Burgess, R., G. (1994). *Analysing qualitative data*. New York: Routledge. Retrieved from:
<http://search.lib.cam.ac.uk/?itemid=eresources161490>

Buckley, M. and Tritt, D. (2011). Ebook approval plans: Integration to meet user needs. *Computer in libraries*, 31(3). Retrieved from
<http://www.questia.com/read/1G1-254097284/ebook-approval-plans-integration-to-meet-user-needs>

Bucknell, T. (2012). Electronic books in academic libraries: A case study in Liverpool, UK. In *Collection development in the digital age* (pp. 71-82). London: Facet publishing.

Burton, S. (2013). "Books are no more threatened by Kindle than stairs by elevators" the impact of ebooks on printed book collections in University of Cambridge Libraries: attitudes of librarians, faculty and suppliers. Master thesis - University of Wales.

Cahill, K. (2009). Building a virtual branch at Vancouver Public Library using Web 2.0 tools. Program: *Electronic Library and Information Systems*, 43 (2), 140-155. doi: 10.1108/00330330910954361

Cambridge University Library. (2008). *Collection development policy 2008-9*. Cambridge, UK: University of Cambridge. Retrieved from www.lib.cam.ac.uk/CDP2008_9.pdf

Cambridge University Library. (2013). *Legal deposit: introduction* [Website]. Retrieved from <http://www.lib.cam.ac.uk/deptserv/legaldeposit/>

Cambridge University Library. (2014a). *Library collections* [Website]. Retrieved from <http://www.lib.cam.ac.uk/collections.htm>

Chowdhury, G. (2012). Building environmentally sustainable information services. *Journal of the American society for information Science and Technology*, 63(4).

Clay, J. (2011). Information technology and e-books. Challenges and opportunities. In K. Price & V. Havergal (Eds.), *E-books in Libraries: A practical guide* (pp. 181-198). London: Facet publishing.

Connaway, L.S., & Powell, R.R. (2010). *Basic research methods for librarians*. Santa Barbara: Libraries Unlimited.

Conner, M. (2014). *The new University Library*. Chicago: American Library Association.

Darke, P., Shanks, G., & Broadbent, M. (1998). Successfully completing case study research: combining rigour, relevance and pragmatism. *Information systems journal*, 8(4), 273-289.

Dawsonera. (2014). *Flexible purchase models* [Website]. Retrieved from <http://www.dawsonbooks.co.uk/productservices/ebooks/flexible-purchase-model/>

Dillon, D. (2001). E-books: University of Texas experience, part 2. *Library Hi Tech News*, 19(4), 350-362. doi:10.1108/EUM00000000006540

Dillon, D. (2011). PDA and libraries today and tomorrow. In *Patron-Driven acquisitions: History and best practices*. (pp. 191-197). Berlin: De Gruyter Saur.

ebooks@cambridge. (2014a). ebooks@cambridge –packages [Website]. Retrieved from http://www.lib.cam.ac.uk/libraries/ebooks_coll.html

ebooks@cambridge. (2014b). ebooks@cambridge – collection [Website]. Retrieved from http://www.lib.cam.ac.uk/libraries/ebooks_promo.html

ebooks@cambridge. (2014c). ebooks@cambridge –promotional materials [Website]. Retrieved from http://www.lib.cam.ac.uk/libraries/ebooks_coll.html

Eggleston, B. (2012). Cataloguing, locating and accessing e-books. In Kaplan (Ed.) *Building and managing e-book collections: a how to do it manual for librarians* (pp. 95-126). London: Facet Publishing.

- Evangeliste, M., & Furlong, K. (2014). *Letting go of legacy services*. Chicago: American Library Association.
- Fieldhouse, M. & Marshall, A. (2012). *Collection development in the digital age*. London: Facet publishing
- Forster, S. 2014. E-textbooks at Coventry University: a pilot project. In *Ebooks in Education: Realising the Vision*. (pp. 125–129). London: Ubiquity Press. doi: <http://dx.doi.org/10.5334/bal.n>
- Fyfe, C. (2014). Ebooks in higher education: a strategic priority? In: Woodward, H. (ed.) *Ebooks in Education: Realising the Vision*. Pp. 1–7. London: Ubiquity Press. doi:<http://dx.doi.org/10.5334/bal.a>
- Garton, S., & Copland, F. (2010). 'I like this interview; I get cakes and cats!': the effect of prior relationships on interview talk. *Qualitative research*, 10(5), 533-551. doi: 10.1177/1468794110375231
- Gee, P. 2014. The Plymouth ebook project. In *Ebooks in Education: Realising the Vision* (pp.119–124). London: Ubiquity Press. doi:<http://dx.doi.org/10.5334/bal.m>
- Gorman, M. (2003). *The enduring library: Technology, tradition, and the quest for balance*. Chicago: American Library Association.
- Gorman, M. (2011) RDA: *The Coming Cataloguing Debacle*. Special Libraries Cataloguing. Retrieved from: <http://www.slc.bc.ca/rda1007.pdf>
- Grace, C. & Needham, G. (2014). Ebooks and the distance learner. In *Ebooks in Education: Realising the Vision* (pp. 15–20). London: Ubiquity Press. doi: <http://dx.doi.org/10.5334/bal.c>
- Gray, D., E. (2004). *Doing research in the real world*. London: Sage.
- Grigg, K. S. (2012). Assessment and evaluation of e-book collections. In *Building and managing e-book collections: a how to do it manual for librarians 2* (pp. 127-137). Chicago: American Library Association.
- Grigson, A. (2011). An introduction to e-book business models and suppliers. In *E-books in libraries: a practical guide* (pp. 19-36). London: Facet Publishing.
- Grove, A. (2014). *Understanding ebook usage: using citation analysis to inform information literacy teaching*. Retrieved from: http://www.slideshare.net/infolit_group/groves
- Gubrium, J., F. & Holstein, J., A. (2002). From the individual interview to the interview society . In *Handbook of interview research* (pp.3-32). Thousand Oaks: Sage.
- Hart, C. (2009). *Doing a literature review: releasing the social science research imagination*. London: Sage.
- Holden, J. (2010). *Acquisition in the new information universe*. London: Neal-Schuman.

House, D. (2012). An overview of e-resources in UK further and higher education. In *Collection development in the digital age* (pp. 47-58). London: Facet Publishing.

Information Automation Ltd. (2009). *E-book collections management in UK universities: focus group report*. Aberystwyth, UK: Information Automation Ltd. Retrieved from http://www.i-a-l.co.uk/resource_biblio.html

Information Automation Ltd. (2014). Resource centre [Website]. Retrieved from http://www.i-a-l.co.uk/resource_biblio.html

JISC. (2009). *ISSU-JISC national e-books observatory final report by JISC Collections*. Bristol, UK: JISC. Retrieved from http://issuu.com/carenmilloy/docs/jisc_national_e-books.observatory_final-report/14?e=1435403/5185864

JISC TechDis. (2013). *E-books and accessibility: a briefing for education libraries*. Bristol, UK: JISC. Retrieved from http://www.jisctechdis.ac.uk/assets/documents/e-Books_and_Accessibility.pdf

Johnson, P. (2013). *Developing and managing electronic collections*. Chicago: American Library Association

Johnson, P. (2009). *Fundamentals of collection development and management* (2nd ed.). Chicago: American Library Association Editions. Retrieved from <http://site.ebrary.com>

Kaplan, R. (Ed.). (2012). *Building and Managing E-book Collections: A How-to-do-it Manual for Librarians* (No. 184). American Library Association.

Kaur, K. (2009). Marketing the academic library on the web. *Library Management*, 30 (6/7), 454-468. doi: 10.1108/01435120910982140

Kelly, J. (2013). PDA summary full report. Cambridge, UK: University of Cambridge. Retrieved from http://www.lib.cam.ac.uk/libraries/PDA_Summary_Full_Report_2013.docs

Kozak, G., L. and Keoleinen, G., A. (2003). Printed scholarly books and ebook reading devices: a comparative life cycle assessment of two book options. IEEE International Symposium on Electronics and the Environment.

Lonsdale, R., & Armstrong, C. (2005). Challenges in managing e-books collections in UK academic libraries. Retrieved from <http://cadair.aber.ac.uk/dspace/handle/2160/1805>

Lonsdale, R. & Armstrong, C. (2010). Promoting your e-books: Lessons from UK JISC National e-Book Observatory. *Program: electronic library and information systems*, 44 (3), 185-206. doi: 10.1108/00330331011064212

Marks, J. & Janke, R., A., (2009). The future of academic publishing: A view from the top. *Journal of Library Administration* 49 (4), 439-458. doi:10.1080/01930820902832579

- McKiel, A. W. (2007). Ebrary's global ebook survey. Ann Arbor: Ebrary.
- Retrieved from
http://www.ebrary.com/corp/collateral/en/Survey/ebrary_eBook_survey_2007.pdf
- McNaught, A. & Alexander, H. (2014). Ebooks and accessibility. In: Woodward, H. (ed.) *Ebooks in Education: Realising the Vision*. Pp. 35–49. London: Ubiquity Press. doi:<http://dx.doi.org/10.5334/bal.e>
- Miller, W. & Pellen, R. M. (Eds.) (2009). *Adopting to e-books*. London: Facet.
- Minčić-Obradović, K. (2011). *E-books in academic libraries*. Oxford: Chandos Publishing.
- Moore, A. (2014). Instant fulfilment: the successful use of patron driven acquisitions to satisfy interlibrary loans. In: Woodward, H. (ed.) *Ebooks in Education: Realising the Vision*. Pp. 79–90. London: Ubiquity Press. doi: <http://dx.doi.org/10.5334/bal.i>
- Nelson, M. R. (2008). E-books in higher education: Nearing the end of the era or hype? *Educause Review*, 43 (2), 40-54. Retrieved from: <http://connect.educause.edu/Library/EDUCAUSE+Review/EbooksinHigherEducationNe/46314>
- Newman, M. (2010). *Librarian ebook survey*. Stanford: HighWire Press. Retrieved from <http://www.nielsenbookdata.co.uk/controller.php?page=1>
- Oliver, C. (2010). *Introducing RDA*. London: Facet publishing
- Paris, M. (1988). Thoughts on the case study. *Journal of Education on Library and Information Science*, 29, 136-138
- Paulson, K. (2011). The story of patron–driven acquisition. In: Swords, D. A. (ed.) *Patron- Driven acquisitions History and best practices*. Pp. 63-79. Boston: Walter de Gruyter.
- Polanka, S. (2009, June 10). Ebook platform evaluation criteria [Blog post]. Retrieved from <http://www.libraries.wright.edu.no/shelfrequired/2009/06/10/ebook-platform-evaluation-criteria/>
- Polanka, S. (2012). No shelf required 2: Use and management of electronic books. London: Facet publishing
- Potter, J., & Wetherell, M. (1994). Analyzing discourse. In Bryman, A. (ed.) *Analyzing qualitative data*. Pp. 47-66. New York: Routledge.
- Robson, (2002). *Real world research* (2nd ed). Oxford: Blackwell.
- Rowlands, I., Nicholas, D., Jamali, H., R., Huntington, P. (2007). What do faculty and students really think about e-books? *ASLIB Proceedings*, 59 (6), pp.489-511

- Scott, D. (2014). Ebooks in further education. In: Woodward, H. (ed.) *Ebooks in Education: Realising the Vision*. Pp. 9–14. London: Ubiquity Press. doi:<http://dx.doi.org/10.5334/bal.b>
- Shaw, W. (2012). Collection development policies for the digital age. In Fieldhouse, M. and Marshall, A. *Collection development in the digital age*. Pp. 165-181. London: Facet Publishing.
- Shelburne, W. A. (2009). E-book usage in an academic library: User attitudes and behaviours. *Library Collections, Acquisitions, and Technical Services*, 33, pp.59-72
- Silverman, D. (Ed). (2010). *Qualitative research: Theory, method and practice* (pp.141-160). London: Sage.
- Singer, C., A. (2012). *Fundamentals of managing reference collection*. London: Facet Publishing.
- Slater, R. (2010). Why aren't e-books gaining more ground in academic libraries? E-book use and perceptions: A review of published literature and research. *Journal of Web Librarianship* 4 (4), 305-331
- Stake, R., E. (2000). Case studies. Handbook of qualitative research. Thousand Oaks: Sage.
- Steiner, R. & Berry, R. (2011). Building new libraries on the international stage: The Near and Middle East. In: Swords, D. A. (ed.) *Patron- Driven acquisitions History and best practices*. Pp. 79-95. Boston: Walter de Gruyter.
- Swords, D.A. (2011). *Patron-driven acquisition. History and best practices*. Boston: Walter de Gruyter.
- Tedd, L. (2005). E-books in academic libraries: An international overview. *New Review of Academic Librarianship*, 11, pp. 57-79
- Thompson, S., & Sharp, S. (2009). E-books in academic libraries: lessons learned and new challenges. *Serials: The Journal for the Serials Community*, 22(2), 136-140.
- Trochim, W., M., K. & Donnelly, J., P. (2007). *The research methods knowledge base*. Mason, OH: Thomson.
- Ulwick, A. W. (2002). The limitations of listening to users. *Harvard Business review*, 80 (1), 91-98.
- Vasileiou, M. & Rowley, J. (2011). Marketing and promotion of e-books in academic libraries. *Journal of documentation*, 67(4), 624-643. doi:[10.1108/002204111111145025](https://doi.org/10.1108/002204111111145025)
- Vasileiou, M., Rowley, J., & Hartley, R. (2012). The e-book management framework: The management of e-books in academic libraries and its challenges. *Library & Information Science Research*, 34 (4), 282-291. doi:[10.1016/j.lisr.2012.06.005](https://doi.org/10.1016/j.lisr.2012.06.005)

- Walker, R. (2014). The management of ebooks within the University of Cambridge. Master thesis – University of Wales.
- Walsh, A. (2012). Using mobile technology to deliver library services. London: Facet Publishing.
- Walters, W. (2014). E-books in academic libraries: Challenges for sharing and use. *Journal of Librarianship and Information Science*, 46 (2), 85-95. doi:10.1177/096100612470279
- Whitehouse, G., Dearnley, J., & Murray, I. (2009). *Still “Destined to be under-read”? Access to books for visually impaired students in UK Higher Education*. Retrieved from <http://link.springer.com/article/10.1007/s12109-009-9124-0/fulltext.html>
- Wilson, M. P. (2014). How green is my ebook [Blog post]. Retrieved from: www.cilip.org.uk/cilip/blog/how-green-my-ebook/
- Woodward, H. (ed.). (2014). *Ebooks in Education: Realising the Vision*. London: Ubiquity Press. doi: <http://dx.doi.org/10.5334/bal>
- Worden, A. (2014). Ebooks at the University of Portsmouth: a ten year success story. In: Woodward, H. (ed.) *Ebooks in Education: Realising the Vision*. Pp. 71–77. London: Ubiquity Press. doi: <http://dx.doi.org/10.5334/bal.h>
- Yin, R., K. (1984). Case study research: Design and Methods. Beverly Hills, Ca: Sage.
- Yin, Z., & Salaba, A. (2009). What is next for functional requirements for bibliographic records? A Delphi study. *Library Quarterly* 79 (2), 233-255.

Appendix A

1: Email to potential interviewees

Dear X,

I am currently working towards my dissertation in Information and library Science with Aberystwyth University. My topic is management of e-books, focusing on challenges associated with acquisition, access and promotion.

For the purpose of my dissertation I am planning to interview key persons responsible for e-books management in your library. The reason I am writing to you is to ask whether you will be willing to participate and help me with my research.

The interview would last no more than one hour and the time and place can be arranged at your convenience. Also, I would like to record the interview but if you do not wish so, please let me know prior the interview. Your anonymity will be respected. The interview will be transcribed and stored securely on my laptop. If you later wish to receive the transcription, I can provide you with the copy.

Please, let me know if you would like to participate and then we can arrange the date and time. Once, that is arranged I'll provide you with more detailed questions. By familiarising with the questions you will notice that they focus equally on three main themes, but if you want to go deeper on any section, your suggestions are welcome.

My plan is to carry out the interviews by the end of December. If you have any questions please, do not hesitate to contact me.

Many thanks for your time and looking forward to hearing from you.

Kindest regards,

Jasmina Makljenovic

Junior Library Assistant

Cambridge University Library

2: Interview recording agreement

Your recorded interview will become part of MscEcon Dissertation Management of e-books in Cambridge University Library. The purpose of this Agreement is to ensure that your contribution is used in strict accordance with your wishes.

This Agreement is made between:

Your name:

Your address: _____

in regard to the recorded interview/s which took place on:

Date/s:

Declaration: I, the Interviewee confirm that I consented to take part in the recording and hereby assign to the Interviewer all copyright in my contribution for use in the dissertation. I understand that this will not affect my moral right to be identified as the 'performer' in accordance with the Copyright, Design and Patents Act 1988.

If you do not wish to assign your copyright to the Interviewer, please state these conditions here:

Both parties shall, by signing below, indicate acceptance of the Agreement.

Interviewee:

Signed:

Name in block capitals: _____ Date: _____

Interviewer:

Signed:

Name in block capitals: . _____ Date: _____

Appendix B:

Interviews transcripts

(full transcripts held by the author)

2.1 Ebooks@cambridge Administrator

Thank you for responding to my email and taking part in the interview.

As I mentioned in our correspondence the interview will last approximately 1 hour and will be recorded. All the information will be kept strictly confidential and stored securely on my laptop.

The interview will focus on three stages of e-books management: acquisition, access and promotion. The questions are tailored according to your role and will include issues associated with administration of e-books for undergraduate students.

The first section is acquisition of e-books for undergraduate students:

- How did ebooks@cambridge begin?
- Is there a CDP on e-books?
- Would formulated CDP on e-books make management of e-books easier?
- Where does the budget come from?
- How do you select titles?
- What about academics/students involvement in recommending titles for purchase?
- Is there a difference in subject availability?
- How do you discover e-books and what tools you use?
- How do you decide which platform to choose?
- How do you decide between publishers and suppliers?
- How do you decide which model to use?

- Which new models have you used and from which suppliers/publishers?
- What are your experiences in using new models?
- What is your experience with PDA with Dawsonera?
- What is your experience with EBA with Wiley and CUP?
- Is there a model that stands out and why?
- Do you use traditional models and when?
- When buying individual titles how do you purchase them, and why?
- As you mentioned DRM, how does that affect your decision to buy an e-book?
- Would you like to add more comments on issues affecting acquisition?

The next section is access

- How easily can users locate an e-book in library catalogue?
- Do you see library catalogue as a main access point?
- How do you put records into library catalogue?
- Do you use supplied MARC records?
- What is the quality of supplied records?
- What do you consider to be good quality record?
- Do you think RDA (new cataloguing rules) will have impact on users' experience?
- How do you assist visually impaired users in accessing e-books?
- Are suppliers/publishers willing to cooperate?
- Do you provide any assistance to users in accessing e-books?
- Do you target different users' groups?
- Do you think that plethora of suppliers platforms is a big issue in accessing e-books?
- Do you think that further development of platforms will have impact on users experience?
- Does DRM poses challenge in accessing e-books and did you have any complaints from users?

- How do you authenticate users to ensure they have access to the e-books they need?
- Did you have any complaints from users related to the authentication process?
- Any more comments on issues affecting access

The next section is promotion

- Are there any guidelines in promoting e-books?
- Do you rely on traditional approaches in promoting e-books and which ones?
- Do you find them effective?
- Do you use new tools and which ones?
- Do you use social media and to what extent?
- In your opinion, how can academics further promote e-books?
- How do you monitor response to the promotional methods?
- Do you get any feedback from users?
- Thank you for taking part in the interview. If you wish I can provide you with a copy of the transcript.
- I will keep you updated with my progress and will send you a summary of my results in the next couple of months.

2.2 Head of UL English Language Acquisition Department

Thank you for responding to my email and taking part in the interview.

As I mentioned in our correspondence the interview will last approximately 1 hour and will be recorded. All the information will be kept strictly confidential and stored securely on my laptop.

The interview will focus on three stages of e-books management: acquisition, access and promotion. The questions are tailored according to your role and will include issues associated with administration of e-books for research students.

The first section is acquisition of e-books for research students:

- Is there a policy on acquiring e-books for research?
- Would formulated CDP on e-books make management of e-books easier?
- Where does the budget come from?
- How do you select titles?
- What about academics/students involvement in recommending titles for purchase?
- Where does the budget come from?
- How do you select titles?
- What about academics/students involvement in recommending titles for purchase?
- Is there a difference in subject availability?
- How do you discover e-books and what tools you use?
- How do you decide which platform to choose?
- How do you decide between publishers and suppliers?
- How do you decide which model to use?
- Which new models have you used and from which suppliers/publishers?
- What are your experiences in using new models?
- What is your experience with PDA?
- What is your experience with EBA?
- Is there a model that stands out and why?
- It seems that DDA is currently preferred model in acquiring e-books for research. What are the reasons?
- Do you use traditional models and when?
- When buying individual titles how do you purchase them, and why?

- As you mentioned DRM, how does that affect your decision to buy an e-book?
- Would you like to add more comments on issues affecting acquisition?

The next section is access:

- How easily can users locate an e-book in library catalogue?
- Do you see library catalogue as a main access point?
- How do you put records into library catalogue?
- Do you use supplied MARC records?
- What is the quality of supplied records?
- What do you consider to be good quality record?
- Do you think new cataloguing rules will have impact on users' experience?
- How do you assist visually impaired users in accessing e-books?
- Are suppliers/publishers willing to cooperate?
- Do you provide any assistance to users in accessing e-books?
- Do you target different users' groups?
- Do you think that plethora of suppliers platforms is a big issue in accessing e-books?
- Do you think that further development of platforms will have impact on users experience?
- Does DRM poses challenge in accessing e-books and did you have any complaints from users?
- How do you authenticate users to ensure they have access to the e-books they need?
- Did you have any complaints from users related to the authentication process?
- Any more comments on issues affecting access

The next section is promotion

- Are there any guidelines in promoting e-books?
- Do you rely on traditional approaches in promoting e-books and which ones?
- Do you find them effective?
- Do you use new tools and which ones?
- Do you use social media and to what extent?
- Do you find that different user group react differently to different promotional methods?
- In your opinion, how can academics further promote e-books?
- How do you monitor response to the promotional methods?
- Do you get any feedback from users?

Thank you for taking part in the interview. If you wish I can provide you with a copy of the transcript.

I will keep you updated with my progress and will send you a summary of my results in the next couple of months.

2.3 Head of Collections and Cataloguing Department

Thank you for responding to my email and taking part in the interview.

As I mentioned in our correspondence the interview will last approximately 1 hour and will be recorded. All the information will be kept strictly confidential and stored securely on my laptop.

The interview will focus on three stages of e-books management: acquisition, access and promotion. The questions are tailored according to your role and they are focused on issues associated with each of the stages mentioned above.

The first section is acquisition of e-books:

- Is there a CDP on e-books?
- Would formulated CDP on e-books make management of e-books easier?
- Where does the budget come from?
- How do you select titles?
- What about academics/students involvement in recommending titles for purchase?
- How do you choose e-books over print?
- Is there a difference in subject availability?
- How do you discover e-books and what tools you use?
- How do you decide which platform to choose?
- How do you decide between publishers and suppliers?
- How do you decide which model to use?
- Which new models have you used and from which suppliers/publishers?
- What are your experiences in using new models?
- What is your experience with PDA?
- What is your experience with EBA?
- Is there a model that stands out and why?
- Do you use traditional models and when?
- Do you find some suppliers have a large delay between publication of print and e-book?
- When buying individual titles how do you purchase them, and why?
- As you mentioned DRM, how does that affect your decision to buy an e-book?
- Would you like to add more comments on issues affecting acquisition?

The next section is access:

- How easily can users locate an e-book in library catalogue?
- Do you see library catalogue as a main access point?
- How do you put records into library catalogue?
- Do you use supplied MARC records?

- What is the quality of supplied records?
- What do you consider to be good quality record?
- Do you think new cataloguing rules will have impact on users' experience?
- How do you assist visually impaired users in accessing e-books?
- Are suppliers/publishers willing to cooperate?
- Do you provide any assistance to users in accessing e-books?
- Do you target different users' groups?
- Do you think that plethora of suppliers platforms is a big issue in accessing e-books?
- Do you think that further development of platforms will have impact on users experience?
- Does DRM poses challenge in accessing e-books and did you have any complaints from users?
- How do you authenticate users to ensure they have access to the e-books they need?
- Did you have any complaints from users related to the authentication process?
- Any more comments on issues affecting access

The next section is promotion:

- Are there any guidelines in promoting e-books?
- Do you rely on traditional approaches in promoting e-books and which ones?
- Do you find them effective?
- Do you use new tools and which ones?
- Do you use social media and to what extent?
- In your opinion, how can academics further promote e-books?
- How do you monitor response to the promotional methods?
- Do you get any feedback from users?

Thank you for taking part in the interview. If you wish I can provide you with a copy of the transcript.

I will keep you updated with my progress and will send you a summary of my results in the next couple of months.

2.4 Head of Legal Deposit department

Thank you for responding to my email and taking part in the interview.

As I mentioned in our correspondence the interview will last approximately 1 hour and will be recorded. All the information will be kept strictly confidential and stored securely on my laptop.

The interview will focus on the impact of e-legal deposit on e-book collections

The first section is input of e-legal deposit:

- When did e-legal deposit begin?
- What do you see as advantages of e-legal deposit?
- Is the e-legal deposit voluntary?
- Can publishers deposit both, print and electronic?
- Do publishers feel keen to deposit?
- What about smaller publishers?
- What are the advantages for publishers if they decide to deposit e-copy?
- How do you know what proportion of e-legal deposit books are used?
- At the moment, the default for legal deposit is print. Do you expect that to change in favour of e-books?

The next section is access:

- What are the main access points?
- Can e-legal deposit be accessed outside the library?
- Are there enough dedicated terminals?
- Are e-books received by legal deposit included in the library catalogue?
- What restrictions apply on e-books received by legal deposit in terms of downloading/ printing?
- In your opinion how the situation with access can be improved?
- What is the quality of records?
- Can metadata be improved later?
- The possibility of dedicated e-reader – what are the possible advantages?

The next section is promotion:

- Are there any guidelines in promoting e-legal deposit?
- Do you rely on traditional tools and which ones?
- Do you find them effective?
- Do you use new tools and which ones?
- Do you use social media and to what extent?
- Do you collaborate with other Cambridge Libraries in promoting e-legal deposit?
- What about the collaboration with other legal deposit libraries?

Thank you for taking part in the interview. If you wish I can provide you with a copy of the transcript.

I will keep you updated with my progress and will send you a summary of my results in the next couple of months.

Appendix C

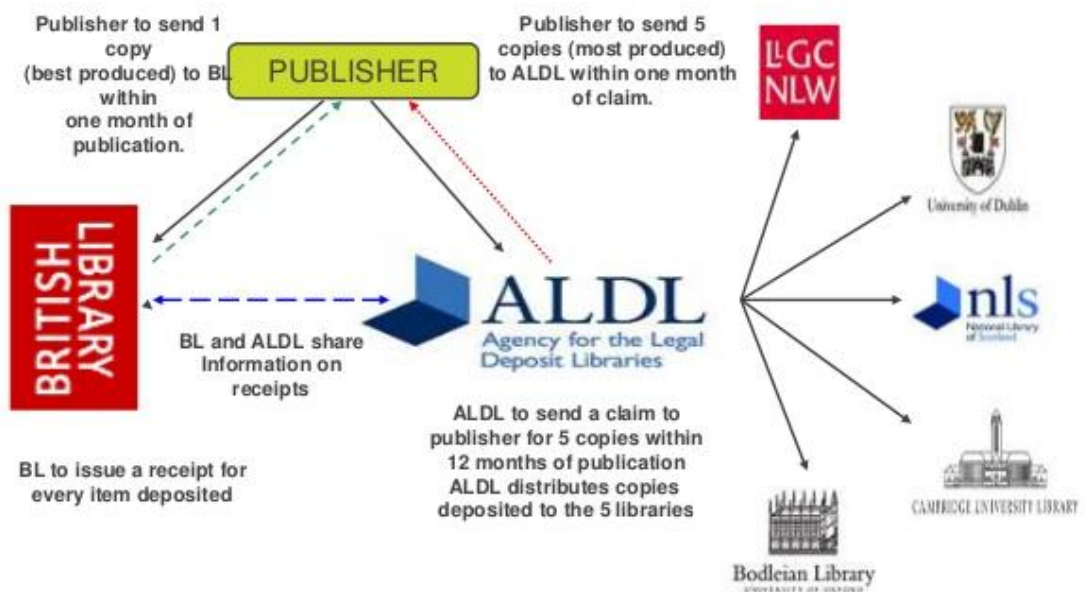
Publishers depositing monographs under NPLD

Woodhead Publishing	2013
Chandos Publishing	2013
Hachette – All imprints	2013
Kogan Page	2013
Do Sustainability	2013
Open book Publishers	2013
Loggerhead Publishing Ltd.	2013
Department for Education	2013
The playwrights Publishing Co	2013
Alfie Dog	2014
Audit Scotland	2014
Accent Press/Xcite Books	2014
Cicerone Press	2014
Severn House	2014

Appendix D

Print legal deposit infrastructure

Print legal deposit infrastructure



www.bl.uk

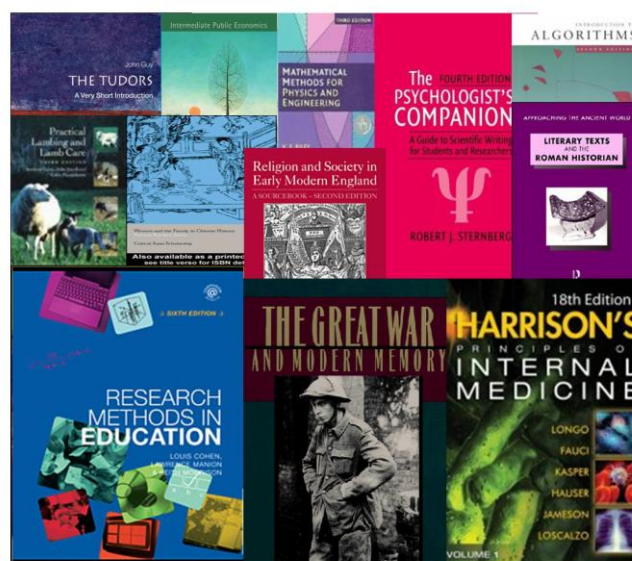
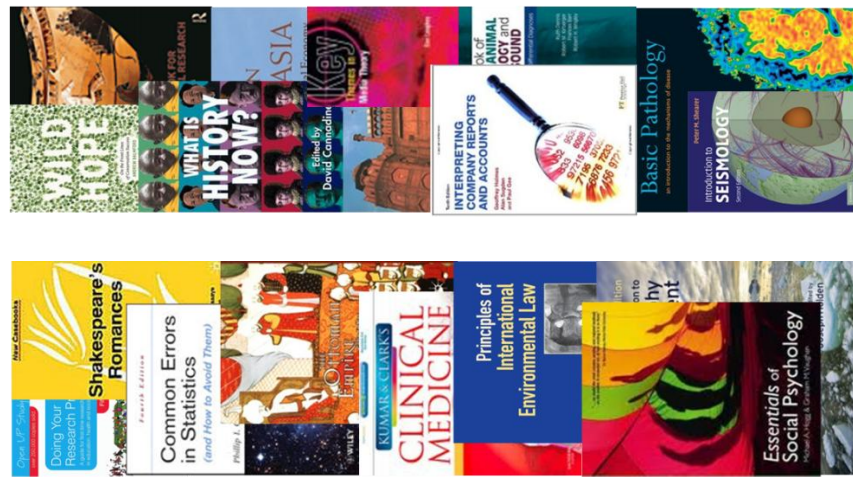
5

From Davis, A. (2014). Legal deposit in a digital age: An overview

Appendix E

Promotional material

Bookmarks and poster (ebooks@cambridge, 2014)



ebooks@cambridge

- Over 2,000 texts available 24/7
- Supplements your print collection
- Access via LibrarySearch / CrossSearch
- Free text searching
- Citation export



<http://www.lib.cam.ac.uk/ebooks/>
ebooks@lib.cam.ac.uk

[@ebookscamb](https://twitter.com/ebookscamb)